

# OWNER'S MANUAL MODEL NO. MC1136 (MC1136B) 11 HP 36 Inch Lawn Tractor

- Assembly
  - Operation
    - Maintenance
      - Service and Adjustments
        - Storage
          - Troubleshooting
            - Repair Parts



# A

### **SAFETY RULES**



#### **Safe Operation Practices for Ride-On Mowers**

**IMPORTANT:** THIS CUTTING MACHINE IS CAPABLE OF AMPUTATING HANDS AND FEET AND THROWING OBJECTS. FAILURE TO OBSERVE THE FOLLOWING SAFETY INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH.



WARNING: In order to prevent accidental starting when setting up, transporting, adjusting or making repairs, always disconnect spark plug wire and place wire where it cannot contact spark plug.



WARNING: Do not coast down a hill in neutral, you may lose control of the tractor.



WARNING: Tow only the attachments that are recommended by and comply with specifications of the manufacturer of your tractor. Use common sense when towing. Operate only at the lowest possible speed when on a slope. Too heavy of a load, while on a slope, is dangerous. Tires can lose traction with the ground and cause you to lose control of your tractor.

#### I. GENERAL OPERATION

- Read, understand, and follow all instructions on the machine and in the manual before starting.
- Do not put hands or feet near rotating parts or under the machine. Keep clear of the discharge opening at all times.
- Only allow responsible adults, who are familiar with the instructions, to operate the machine.
- Clear the area of objects such as rocks, toys, wire, etc., which could be picked up and thrown by the blades.
- Be sure the area is clear of bystanders before operating. Stop machine if anyone enters the area.
- Never carry passengers.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Never direct discharged material toward anyone. Avoid discharging material against a wall or obstruction. Material may ricochet back toward the operator. Stop the blades when crossing gravel surfaces.
- Do not operate machine without the entire grass catcher, discharge guard, or other safety devices in place and working.
- Slow down before turning.
- Never leave a running machine unattended. Always turn off blades, set parking brake, stop engine, and remove keys before dismounting.

- Disengage blades when not mowing. Shut off engine and wait for all parts to come to a complete stop before cleaning the machine, removing the grass catcher, or unclogging the discharge guard.
- Operate machine only in daylight or good artificial light.
- Do not operate the machine while under the influence of alcohol or drugs.
- Watch for traffic when operating near or crossing roadways.
- Use extra care when loading or unloading the machine into a trailer or truck.
- Always wear eye protection when operating machine.
- Data indicates that operators, age 60 years and above, are involved in a large percentage of riding mower-related injuries. These operators should evaluate their ability to operate the riding mower safely enough to protect themselves and others from serious injury.
- Follow the manufacturer's recommendation for wheel weights or counterweights.
- Keep machine free of grass, leaves or other debris build-up which can touch hot exhaust / engine parts and burn. Do not allow the mower deck to plow leaves or other debris which can cause build-up to occur. Clean any oil or fuel spillage before operating or storing the machine. Allow machine to cool before storage.

#### II. SLOPE OPERATION

Slopes are a major factor related to loss of control and tip-over accidents, which can result in severe injury or death. Operation on all slopes requires extra caution. If you cannot back up the slope or if you feel uneasy on it, do not mow it.

- Mow up and down slopes, not across.
- Watch for holes, ruts, bumps, rocks, or other hidden objects. Uneven terrain could overturn the machine.
   Tall grass can hide obstacles.
- Choose a low ground speed so that you will not have to stop or shift while on the slope.
- Do not mow on wet grass. Tires may lose traction. Always keep the machine in gear when going down slopes. Do not shift to neutral and coast downhill.
- Avoid starting, stopping, or turning on a slope. If the tires lose traction, disengage the blades and proceed slowly straight down the slope.
- Keep all movement on the slopes slow and gradual.
   Do not make sudden changes in speed or direction, which could cause the machine to roll over.
- Use extra care while operating machine with grass catchers or other attachments; they can affect the stability of the machine. Do no use on steep slopes.
- Do not try to stabilize the machine by putting your foot on the ground.
- Do not mow near drop-offs, ditches, or embankments.
   The machine could suddenly roll over if a wheel is over the edge or if the edge caves in.

# **SAFETY RULES**

# Safe Operation Practices for Ride-On Mowers



#### III. CHILDREN

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the mowing activity. Never assume that children will remain where you last saw them.

- Keep children out of the mowing area and in the watchful care of a responsible adult other than the operator.
- Be alert and turn machine off if a child enters the
- Before and while backing, look behind and down for small children.
- Never carry children, even with the blades shut off. They may fall off and be seriously injured or interfere with safe machine operation. Children who have been given rides in the past may suddenly appear in the mowing area for another ride and be run over or backed over by the machine.
- Never allow children to operate the machine.
- Use extra care when approaching blind corners, shrubs, trees, or other objects that may block your view of a

#### IV. TOWING

- Tow only with a machine that has a hitch designed for towing. Do not attach towed equipment except at the hitch point.
- Follow the manufacturer's recommendation for weight limits for towed equipment and towing on slopes.
- Never allow children or others in or on towed equip-
- On slopes, the weight of the towed equipment may cause loss of traction and loss of control.
- Travel slowly and allow extra distance to stop.

#### V. SERVICE

#### SAFE HANDLING OF GASOLINE

To avoid personal injury or property damage, use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive.

- Extinguish all cigarettes, cigars, pipes, and other sources of ignition.
- Use only approved gasoline container.
- Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling.
- Never fuel the machine indoors.
- Never store the machine or fuel container where there is an open flame, spark, or pilot light such as on a water heater or other appliances.
- Never fill containers inside a vehicle or on a truck or trailer bed with plastic liner. Always place containers on the ground away from your vehicle when filling.
- Remove gas-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment with a portable container, rather than from a gasoline dispenser nozzle.
- Keep the nozzle in contact with the rim of the fuel tank or container opening at all times until fueling is complete. Do not use a nozzle lock-open device.
- If fuel is spilled on clothing, change clothing immedi-
- Never overfill fuel tank. Replace gas cap and tighten securely.

#### **GENERAL SERVICE**

- Never operate machine in a closed are.
- Keep all nuts and bolts tight to be sure the equipment is in safe working condition.
- Never tamper with safety devices. Check their proper operation regularly.
- Keep machine free of grass, leaves, or other debris build-up. Clean oil or fuel spillage and remove any fuelsoaked debris. Allow machine to cool before storing.
- If you strike a foreign object, stop and inspect the machine. Repair, if necessary, before restarting.
- Never make any adjustments or repairs with the engine
- Check grass catcher components and the discharge guard frequently and replace with manufacturer's recommended parts, when necessary.
- Mower blades are sharp. Wrap the blade or wear gloves, and use extra caution when servicing them. Check brake operation frequently. Adjust and service
- as required.
- Maintain or replace safety and instruction labels, as necessary.











- Be sure the area is clear of bystanders before operating. Stop machine if anyone enters the area.
- Never carry passengers.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backina.
- Never carry children, even with the blades shut off. They may fall off and be seriously injured or interfere with safe machine operation. Children who have been given rides in the past may suddenly appear in the mowing area for another ride and be run over or backed over by the machine.
- Keep children out of the mowing area and in the watchful care of a responsible adult other than the operator.
- Be alert and turn machine off if a child enters the area
- Before and while backing, look behind and down for small children.
- Mow up and down slopes (15° Max), not across.
- Be alert and turn machine off if a child enters the
- Choose a low ground speed so that you will not have to stop or shift while on the slope.
- Avoid starting, stopping, or turning on a slope. If the tires lose traction, disengage the blades and proceed slowly straight down the slope.
- If machine stops while going uphill, disengage blades, shift into reverse and back down slowly.
- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.

#### PRODUCT SPECIFICATIONS

Gasoline Capacity and type:	1.25 Gallons Unleaded Regular
Oil Type (API-SG-SL):	SAE 30 (above 32°F) SAE 5W-30 (below 32°F)
Oil Capacity:	3 Pints
Spark Plug: (Gap: .030")	Champion RC12YC
Ground Speed (MPH):	Forward:  1st 1.1 2nd 2.2 3rd 3.3 4th 4.9 Reverse: 1.4
Tire Pressure:	Front: 14 PSI Rear: 12 PSI
Charging System:	3 Amps Battery 5 Amps Headlights
Battery:	AMP/HR: 28 MIN. CCA: 230 Case Size: U1R
Blade Bolt Torque:	27-35 FT. LBS.

**CONGRATULATIONS** on your purchase of a new tractor. It has been designed, engineered and manufactured to give you the best possible dependability and performance.

Should you experience any problem you cannot easily remedy, please contact your nearest authorized service center/department. We have competent, well-trained technicians and the proper tools to service or repair this tractor.

Please read and retain this manual. The instructions will enable you to assemble and maintain your tractor properly. Always observe the "SAFETY RULES".

#### **CUSTOMER RESPONSIBILITIES**

- Read and observe the safety rules.
- Follow a regular schedule in maintaining, caring for and using your tractor.
- Follow the instructions under "Maintenance" and "Storage" sections of this owner's manual.

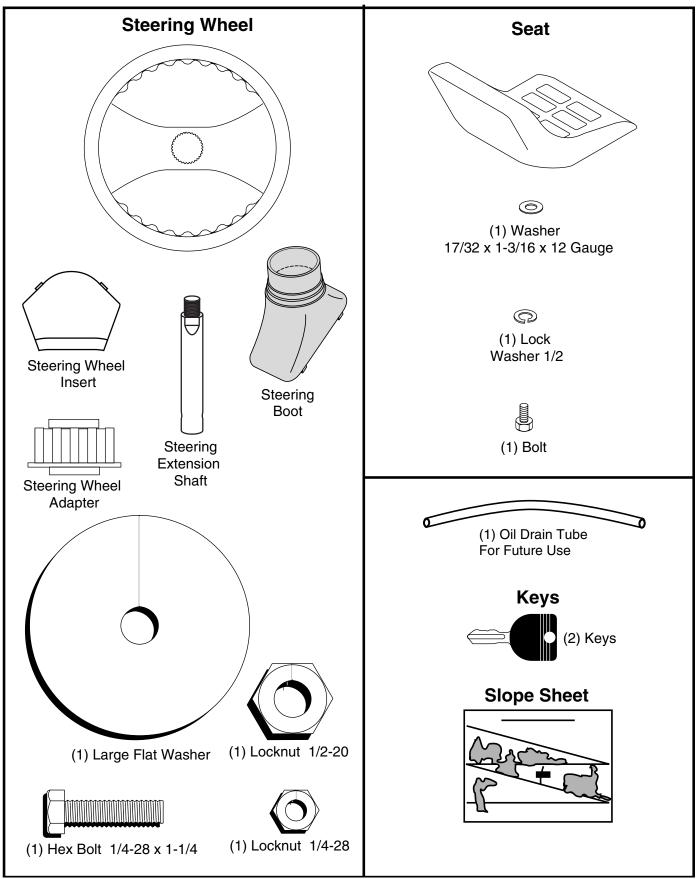
**WARNING:** This tractor is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

A spark arrester for the muffler is available through your nearest authorized service center/department (See REPAIR PARTS section of this manual).

# **TABLE OF CONTENTS**

SAFETY RULES	2-3	MAINTENANCE	14-1
		SERVICE AND ADJUSTMENTS	
CUSTOMER RESPONSIBILITIES	4	STORAGE	2
ASSEMBLY	6-8	TROUBLESHOOTING	24-2
OPERATION	9-13	REPAIR PARTS	28-4
MAINTENANCE SCHEDULE	14		

# **UNASSEMBLED PARTS**



## **ASSEMBLY**

Your new tractor has been assembled at the factory with exception of those parts left unassembled for shipping purposes. To ensure safe and proper operation of your tractor all parts and hardware you assemble must be tightened securely. Use the correct tools as necessary to insure proper tightness.

#### TOOLS REQUIRED FOR ASSEMBLY

A socket wrench set will make assembly easier. Standard wrench sizes are listed.

(2) 7/16" wrenches Pliers

(1) 3/4" wrench Tire pressure gauge

Utility knife

When right or left hand is mentioned in this manual, it means when you are in the operating position (seated behind the steering wheel).

# TO REMOVE TRACTOR FROM CARTON

#### **UNPACK CARTON**

- Remove all accessible loose parts and parts cartons from carton.
- Cut along dotted lines on all four panels of carton. Remove end panels and lay side panels flat.
- Check for any additional loose parts or cartons and remove.

# BEFORE REMOVING TRACTOR FROM SKID

#### ATTACH STEERING WHEEL (See Fig. 1)

ASSEMBLE EXTENSION SHAFT AND BOOT

 Slide extension shaft onto lower steering shaft. Align mounting holes in extension and lower shafts and install 1/4 hex bolt and locknut. Tighten securely.

**IMPORTANT**: TIGHTEN BOLT AND NUT SECURELY TO 10-12 FT. LBS TORQUE.

 Place tabs of steering boot over tab slots in dash and push down to secure.

#### **INSTALL STEERING WHEEL**

- Position front wheels of the tractor so they are pointing straight forward.
- Remove steering wheel adapter from steering wheel and slide adapter onto steering shaft extension.
- Position steering wheel so cross bars are horizontal (left to right) and slide inside boot and onto adapter.
- Assemble large flat washer, 1/2 hex nut and tighten securely.
- Snap steering wheel insert into center of steering wheel.
- Remove protective materials from tractor hood and grill.

**IMPORTANT:** CHECK FOR AND REMOVE ANY STAPLES IN SKID THAT MAY PUNCTURE TIRES WHERE TRACTOR IS TO ROLL OFF SKID.

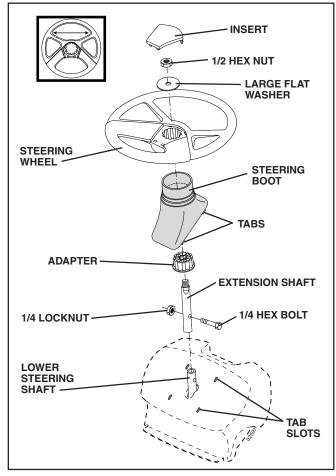


FIG. 1

## **ASSEMBLY**

#### **HOW TO SET UP YOUR TRACTOR**

#### **INSTALL SEAT (See Fig. 2)**

Adjust seat before tightening adjustment bolt.

- Remove adjustment bolt, lock washer and flat washer securing seat to cardboard packing and set aside for assembly of seat to tractor.
- Pivot seat upward and remove from the cardboard packing. Remove the cardboard packing and discard.
- Place seat on seat pan so head of shoulder bolt is positioned over large slotted hole in pan.
- Push down on seat to engage shoulder bolt in slot and pull seat towards rear of tractor.
- Pivot seat and pan forward and assemble adjustment bolt, lockwasher and flat washer loosely. Do not tighten
- Lower seat into operating position and sit on seat.
- Slide seat until a comfortable position is reached which allows you to press clutch/brake pedal all the way down.
- Get off seat without moving its adjusted position.
- Raise seat and tighten adjustment bolt securely.

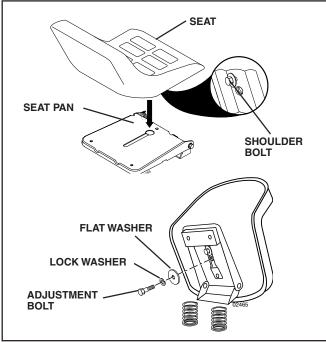


FIG. 2

#### CHECK BATTERY (See Fig. 3)

- Lift seat pan to raised position.
- If this battery is put into service after month and year indicated on label (label located between terminals) charge battery for minimum of one hour at 6-10 amps. (See "BATTERY" in the Maintenance section of this manual for charging instructions).

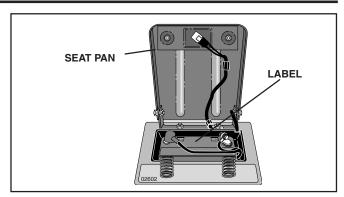


FIG. 3

**NOTE:** You may now roll or drive your tractor off the skid. Follow the appropriate instruction below to remove the tractor from the skid.

# TO ROLL TRACTOR OFF SKID (See Operation section for location and function of controls)

- Press lift lever plunger and raise attachment lift lever to its highest position.
- Release parking brake by depressing clutch/brake pedal.
- Place gearshift lever in neutral (N) position.
- Roll tractor forward off skid.
- Remove banding holding deflector shield up against tractor

# TO DRIVE TRACTOR OFF SKID (See Operation section for location and function of controls)

**AWARNING:** Before starting, read, understand and follow all instructions in the Operation section of this manual. Be sure tractor is in a well-ventilated area. Be sure the area in front of tractor is clear of other people and objects.

- Be sure all the above assembly steps have been completed.
- Check engine oil level and fill fuel tank with gasoline.
- Sit on seat in operating position, depress clutch/brake pedal and set the parking brake.
- Place gear shift lever in neutral (N) position.
- Press lift lever plunger and raise attachment lift lever to its highest position.
- Start the engine. After engine has started, move throttle control to idle position.
- Depress clutch/brake pedal into full "BRAKE" position and hold. Move gearshift lever to 1st gear.
- Slowly release clutch/brake pedal and slowly drive tractor off skid.
- Apply brake to stop tractor, set parking brake and place gearshift lever in neutral position.
- Turn ignition key to "OFF" position.

Continue with the instructions that follow.

## **ASSEMBLY**

#### **CHECK TIRE PRESSURE**

The tires on your tractor were overinflated at the factory for shipping purposes. Correct tire pressure is important for best cutting performance.

 Reduce tire pressure to PSI shown in "PRODUCT SPECIFICATIONS" section of this manual.

#### CHECK DECK LEVELNESS

For best cutting results, mower housing should be properly leveled. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.

# CHECK FOR PROPER POSITION OF ALL BELTS

See the figures that are shown for replacing motion and mower blade drive belts in the Service and Adjustments section of this manual. Verify that the belts are routed correctly.

#### **CHECK BRAKE SYSTEM**

After you learn how to operate your tractor, check to see that the brake is properly adjusted. See "TO ADJUST BRAKE" in the Service and Adjustments section of this manual.

#### ✓ CHECKLIST

BEFORE YOU OPERATE AND ENJOY YOUR NEW TRACTOR, WE WISH TO ASSURE THAT YOU RECEIVE THE BEST PERFORMANCE AND SATISFACTION FROM THIS QUALITY PRODUCT.

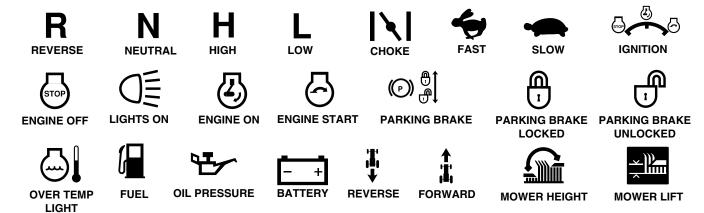
#### PLEASE REVIEW THE FOLLOWING CHECKLIST:

- ✓ All assembly instructions have been completed.
- ✓ No remaining loose parts in carton.
- ✓ Battery is properly prepared and charged. (Minimum 1 hour at 6 amps).
- ✓ Seat is adjusted comfortably and tightened securely.
- ✓ All tires are properly inflated. (For shipping purposes, the tires were overinflated at the factory).
- Be sure mower deck is properly leveled side-to-side/ front-to-rear for best cutting results. (Tires must be properly inflated for leveling).
- Check mower and drive belts. Be sure they are routed properly around pulleys and inside all belt keepers.
- Check wiring. See that all connections are still secure and wires are properly clamped.

WHILE LEARNING HOW TO USE YOUR TRACTOR, PAY EXTRA ATTENTION TO THE FOLLOWING IMPORTANT ITEMS:

- Engine oil is at proper level.
- ✓ Fuel tank is filled with fresh, clean, regular unleaded gasoline.
- ✓ Become familiar with all controls their location and function. Operate them before you start the engine.
- ✓ Be sure brake system is in safe operating condition.

These symbols may appear on your tractor or in literature supplied with the product. Learn and understand their meaning.



















**ATTACHMENT** 



DANGER, KEEP HANDS AND FEET AWAY



will result in death or serious injury.



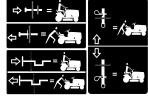




CLUTCH ENGAGED CLUTCH DISENGAGED

**KEEP AREA CLEAR** 

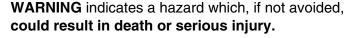
**SLOPE HAZARDS** (SEE SAFETY RULES SECTION)



**FREE WHEEL** (Automatic Models only)





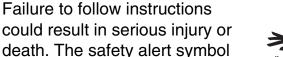


**DANGER** indicates a hazard which, if not avoided,



**CAUTION** indicates a hazard which, if not avoided, might result in minor or moderate injury.

**CAUTION** when used without the alert symbol, indicates a situation that **could result in damage** to the tractor and/or engine.



is used to identify safety information about hazards which can result in death, serious injury and/or property damage.



**HOT SURFACES** indicates a hazard which, if not avoided, could result in death, serious injury and/or property damage.



FIRE indicates a hazard which, if not avoided, could result in death, serious injury and/or property damage.

#### **KNOW YOUR TRACTOR**

#### READ THIS OWNER'S MANUAL AND SAFETY RULES BEFORE OPERATING YOUR TRACTOR

Compare the illustrations with your tractor to familiarize yourself with the locations of various controls and adjustments. Save this manual for future reference.

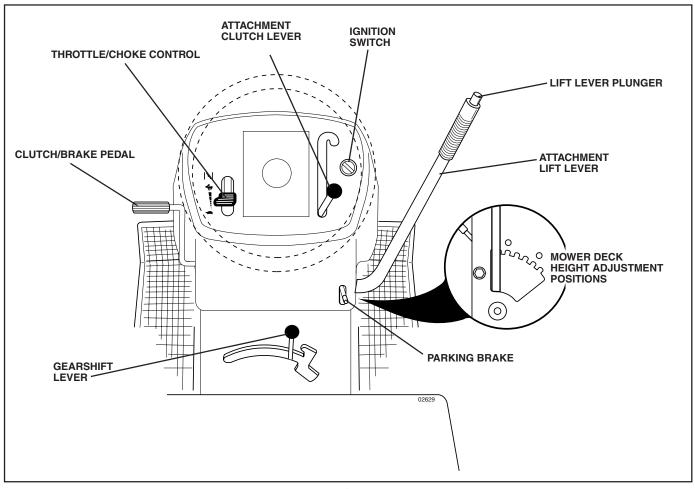


FIG. 4

Our tractors conform to the safety standards of the American National Standards Institute.

**ATTACHMENT CLUTCH LEVER** - Used to engage the mower blades, or other attachments mounted to your tractor.

**THROTTLE/CHOKE CONTROL** - Used for starting and controlling engine speed.

**CLUTCH/BRAKE PEDAL** - Used for declutching and braking the tractor and starting the engine.

**PARKING BRAKE** - Locks clutch/brake pedal into the brake position.

**GEARSHIFT LEVER** - Selects the speed and direction of tractor.

**ATTACHMENT LIFT LEVER** - Used to raise, lower, and adjust the mower deck or other attachments mounted to your tractor.

**LIFT LEVER PLUNGER** - Used to release attachment lift lever when changing its position.

**IGNITION SWITCH** - Used for starting and stopping the engine.



The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend a wide vision safety mask over spectacles or standard safety glasses.

# HOW TO USE YOUR TRACTOR TO SET PARKING BRAKE (See Fig. 5)

Your tractor is equipped with an operator presence sensing switch. When engine is running, any attempt by the operator to leave the seat without first setting the parking brake will shut off the engine.

- Depress clutch/brake pedal into full "BRAKE" position and hold.
- Place parking brake lever in "ENGAGED" position and release pressure from clutch/brake pedal. Pedal should remain in "BRAKE" position. Make sure parking brake will hold tractor secure.

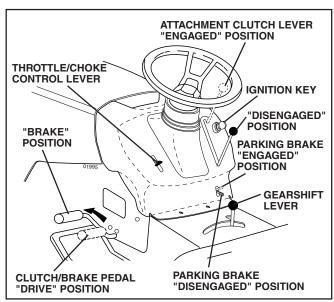


FIG.5

#### STOPPING (See Fig. 5)

**MOWER BLADES -**

 To stop mower blades, move attachment clutch lever to "DISENGAGED" position.

#### **GROUND DRIVE -**

- To stop ground drive, depress clutch/brake pedal into full "BRAKE" position.
- Move gearshift lever to neutral (N) position.
   ENGINE -
- Move throttle control between half and full speed (fast) position.

**NOTE:** Failure to move throttle control between half and full speed (fast) position, before stopping may cause engine to "backfire".

- Turn ignition key to "STOP" position and remove key. Always remove key when leaving tractor to prevent unauthorized use.
- Never use choke to stop engine.

**IMPORTANT:** LEAVING THE IGNITION SWITCH IN ANY POSITION OTHER THAN "OFF" WILL CAUSE THE BATTERY TO BE DISCHARGED, (DEAD).

**NOTE:** Under certain conditions when tractor is standing idle with the engine running, hot engine exhaust gases may cause "browning" of grass. To eliminate this possibility, always stop engine when stopping tractor on grass areas.



CAUTION: Always stop tractor completely, as described above, before leaving the operator's position; to empty grass catcher, etc.

#### TO USE THROTTLE CONTROL (See Fig. 5)

Always operate engine at full throttle.

- Operating engine at less than full throttle reduces the battery charging rate.
- Full throttle offers the best bagging and mower performance.

# TO MOVE FORWARD AND BACKWARD (See Fig. 5)

The direction and speed of movement is controlled by the gearshift lever.

- Start tractor with clutch/brake pedal depressed and gearshift lever in neutral (N) position.
- Move gearshift lever to desired position.
- Slowly release clutch/brake pedal to start movement.

IMPORTANT: BRING TRACTOR TO A COMPLETE STOP BEFORE SHIFTING OR CHANGING GEARS. FAILURE TO DO SO WILL SHORTEN THE USEFUL LIFE OF YOUR TRANSAXLE.

# TO ADJUST MOWER CUTTING HEIGHT (See Fig. 5)

The position of the attachment lift lever determines the cutting height.

- Grasp lift lever.
- Press plunger with thumb and move lever to desired position.

The cutting height range is approximately 1-1/2 to 4". The heights are measured from the ground to the blade tip with the engine not running. These heights are approximate and may vary depending upon soil conditions, height of grass and types of grass being mowed.

- The average lawn should be cut to approximately 2-1/2 inches during the cool season and to over 3 inches during hot months. For healthier and better looking lawns, mow often and after moderate growth.
- For best cutting performance, grass over 6 inches in height should be mowed twice. Make the first cut relatively high; the second to desired height.

#### TO OPERATE MOWER (See Fig. 6)

Your tractor is equipped with an operator presence sensing switch. Any attempt by the operator to leave the seat with the engine running and the attachment clutch engaged will shut off the engine. You must remain fully and centrally positioned in the seat to prevent the engine from hesitating or cutting off when operating your equipment on rough, rolling terrain or hills.

- Select desired height of cut.
- Start mower blades by engaging attachment clutch control.
- TO STOP MOWER BLADES disengage attachment clutch control.



CAUTION: Do not operate the mower without either the entire grass catcher, on mowers so equipped, or the deflector shield in place.

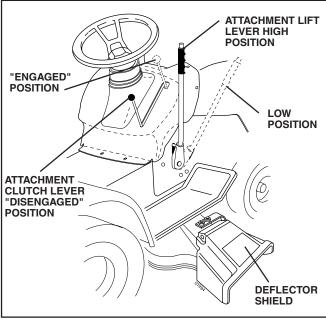


FIG. 6

#### TO OPERATE ON HILLS



WARNING: Do not drive up or down hills with slopes greater than 15° and do not drive across any slope.

- Choose the slowest speed before starting up or down hills.
- Avoid stopping or changing speed on hills.
- If slowing is necessary, move throttle control lever to slower position.
- If stopping is absolutely necessary, push clutch/brake pedal quickly to brake position and engage parking brake.
- Move gearshift lever to 1st gear. Be sure you have allowed room for tractor to roll slightly as you restart movement.

- To restart movement, slowly release parking brake and clutch/brake pedal.
- Make all turns slowly.

#### **TO TRANSPORT**

- Raise attachment lift to highest position with attachment lift control.
- When pushing or towing your tractor, be sure gearshift lever is in neutral (N) position.
- Do not push or tow tractor at more than five (5) MPH.

**NOTE**: To protect hood from damage when transporting your tractor on a truck or a trailer, be sure hood is closed and secured to tractor. Use an appropriate means of tying hood to tractor (rope, cord, etc.).

#### TOWING CARTS AND OTHER ATTACH-MENTS

Tow only the attachments that are recommended by and comply with specifications of the manufacturer of your tractor. Use common sense when towing. Too heavy of a load, while on a slope, is dangerous. Tires can lose traction with the ground and cause you to lose control of your tractor.

#### BEFORE STARTING THE ENGINE

#### **CHECK ENGINE OIL LEVEL**

- The engine in your tractor has been shipped, from the factory, already filled with summer weight oil.
- Check engine oil with tractor on level ground.
- Remove oil fill cap/dipstick and wipe clean, reinsert the dipstick and screw cap tight, wait for a few seconds, remove and read oil level. If necessary, add oil until "FULL" mark on dipstick is reached. Do not overfill.
- For cold weather operation you should change oil for easier starting (See "OIL VISCOSITY CHART" in the Maintenance section of this manual).
- To change engine oil, see the Maintenance section in this manual.

#### **ADD GASOLINE**

Fill fuel tank to bottom of filler neck. Do not overfill.
Use fresh, clean, regular unleaded gasoline with a
minimum of 87 octane. (Use of leaded gasoline will
increase carbon and lead oxide deposits and reduce
valve life). Do not mix oil with gasoline. Purchase fuel
in quantities that can be used within 30 days to assure
fuel freshness.



CAUTION: Wipe off any spilled oil or fuel. Do not store, spill or use gasoline near an open flame.

IMPORTANT: WHEN OPERATING IN TEMPERATURES BELOW32°F(0°C), USE FRESH, CLEAN WINTER GRADE GASOLINE TO HELP INSURE GOOD COLD WEATHER STARTING.

**CAUTION:** Alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. Drain the gas tank, start the engine and let it run until the fuel lines and carburetor are empty. Use fresh fuel next season. See Storage Instructions for additional information. Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.

#### TO START ENGINE (See Fig. 5)

When starting the engine for the first time or if the engine has run out of fuel, it will take extra cranking time to move fuel from the tank to the engine.

- Sit on seat in operating position, depress clutch/brake pedal and set parking brake.
- Place gear shift lever in neutral (N) position.
- Move attachment clutch to "DISENGAGED" position.
- Move throttle control to choke position.

**NOTE:** Before starting, read the warm and cold starting procedures below.

Insert key into ignition and turn key clockwise to "START" position and release key as soon as engine starts. Do not run starter continuously for more than fifteen seconds per minute. If the engine does not start after several attempts, move throttle control to fast position, wait a few minutes and try again. If engine still does not start, move the throttle control back to the choke position and retry.

#### WARM WEATHER STARTING (50° F and above)

- When engine starts, move the throttle control to the fast position.
- The attachments and ground drive can now be used. If the engine does not accept the load, restart the engine and allow it to warm up for one minute using the choke as described above.

#### COLD WEATHER STARTING (50° F and below)

- When engine starts, allow engine to run with the throttle control in the choke position until the engine runs roughly, then move throttle control to fast position. This may require an engine warm-up period from several seconds to several minutes, depending on the temperature.
- The attachments can also be used during the engine warm-up period.

**NOTE:** If at a high altitude (above 3000 feet) or in cold temperatures (below 32 F) the carburetor fuel mixture may need to be adjusted for best engine performance. See "TO ADJUST CARBURETOR" in the Service and Adjustments section of this manual.

#### **MOWING TIPS**

- Tire chains cannot be used when the mower housing is attached to tractor.
- Mower should be properly leveled for best mowing performance. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.
- The left hand side of mower should be used for trimming.
- Drive so that clippings are discharged onto the area that has been cut. Have the cut area to the right of the machine. This will result in a more even distribution of clippings and more uniform cutting.
- When mowing large areas, start by turning to the right so that clippings will discharge away from shrubs, fences, driveways, etc. After one or two rounds, mow in the opposite direction making left hand turns until finished (See Fig. 7).

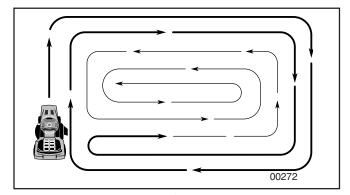


FIG. 7

- If grass is extremely tall, it should be mowed twice to reduce load and possible fire hazard from dried clippings. Make first cut relatively high; the second to the desired height.
- Do not mow grass when it is wet. Wet grass will plug mower and leave undesirable clumps. Allow grass to dry before mowing.
- Always operate engine at full throttle when mowing to assure better mowing performance and proper discharge of material. Regulate ground speed by selecting a low enough gear to give the mower cutting performance as well as the quality of cut desired.
- When operating attachments, select a ground speed that will suit the terrain and give best performance of the attachment being used.

AS	MAINTENANCE SCHEDUL LIN DATES YOU COMPLETE GULAR SERVICE	E	BEFORE	EACHUS EVERY 8	HOURS HOURS	S HOUR S HOUR VERY S	S HOUP O HOUP VERY	O HOU	RS ON SEASON	SERVIC	CE DATES	
	Check Brake Operation	<b>V</b>	<b>/</b>									1
	Check Tire Pressure	<b>/</b>	<b>/</b>									
Т.	Check Operator Presence and Interlock Systems	/										
R	Check for Loose Fasteners	<b>/</b>				<b>1</b> 5		<b>/</b>				
ΙÀ	Sharpen/Replace Mower Blades			<b>1</b> 3								
Ç	Lubrication Chart			<b>/</b>				<b>/</b>				
Ιċ	Check Battery Level			<b>1</b> 4								
R	Clean Battery and Terminals			<b>/</b>				<b>/</b>				
	Check Transaxle Cooling			<b>/</b>								
	Check V-Belts					<b>V</b>						_
	Check Engine Oil Level	<b>V</b>	1									
	Change Engine Oil (with oil filter)				<b>1</b> ,2	2		/				
lε	Change Engine Oil (without oil filter)			<b>1</b> ,2				<b>/</b>				
N	Clean Air Filter			<b>✓</b> 2								1
G	Clean Air Screen			<b>1</b> /2								1
l I	Inspect Muffler/Spark Arrester				1							1
ΙË	Replace Oil Filter (If equipped)					1,2						3
l –	Clean Engine Cooling Fins					<b>1</b> 2						aint_s
	Replace Spark Plug					1	1					sch-tra
	Replace Air Filter Paper Cartridge					<b>1</b> 2						actore
	Replace Fuel Filter						1					maint_sch-tractore.new

- 1 Change more often when operating under a heavy load or in high ambient temperatures.
- 2 Service more often when operating in dirty or dusty conditions.
- 3 Replace blades more often when mowing in sandy soil.
- 4 Not required if equipped with maintenance-free battery.
- Tighten front axle pivot bolt to 35 ft.-lbs. maximum. Do not overtighten.

#### GENERAL RECOMMENDATIONS

The warranty on this tractor does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, operator must maintain tractor as instructed in this manual.

Some adjustments will need to be made periodically to properly maintain your tractor.

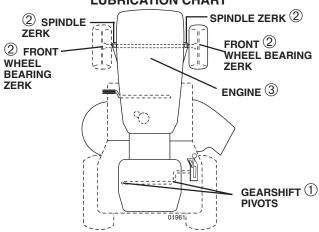
At least once a season, check to see if you should make any of the adjustments described in the Service and Adjustments section of this manual.

At least once a year you should replace the spark plug, clean or replace air filter, and check blades and belts for wear. A new spark plug and clean air filter assure proper air-fuel mixture and help your engine run better and last longer.

#### **BEFORE EACH USE**

- Check engine oil level.
- Check brake operation.
- Check tire pressure.
- Check operator presence and interlock systems for proper operation.
- Check for loose fasteners.

#### **LUBRICATION CHART**



- ① SAE 30 OR 10W30 MOTOR OIL
- **GENERAL PURPOSE GREASE**
- **REFER TO MAINTENANCE "ENGINE" SECTION**

**IMPORTANT: DO NOT OIL OR GREASE THE PIVOT POINTS** WHICH HAVE SPECIAL NYLON BEARINGS. VISCOUS LUBRICANTS WILL ATTRACT DUST AND DIRT THAT WILL SHORTENTHE LIFE OF THE SELF-LUBRICATING BEARINGS. IF YOU FEEL THEY MUST BE LUBRICATED, USE ONLY A DRY, POWDERED GRAPHITE TYPE LUBRICANT SPARINGLY.

#### **TRACTOR**

Always observe safety rules when performing any maintenance.

#### **BRAKE OPERATION**

If tractor requires more than five (5) feet to stop at highest speed in highest gear on a level, dry concrete or paved surface, then brake must be checked and adjusted.

#### **TIRES**

- Maintain proper air pressure in all tires (See "PRODUCT SPECIFICATIONS" section of this manual).
- Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.
- Avoid stumps, stones, deep ruts, sharp objects and other hazards that may cause tire damage.

**NOTE:** To seal tire punctures and prevent flat tires due to slow leaks, tire sealant may be purchased from your local parts dealer. Tire sealant also prevents tire dry rot and corrosion.

#### OPERATOR PRESENCE SYSTEM

Be sure operator presence and interlock systems are working properly. If your tractor does not function as described, repair the problem immediately.

- The engine should not start unless the clutch/brake pedal is fully depressed and attachement clutch control is in the disengaged position.
- When the engine is running, any attempt by the operator to leave the seat without first setting the parking brake should shut off the engine.
- When the engine is running and the attachment clutch is engaged, any attempt by the operator to leave the seat should shut off the engine.
- The attachment clutch should never operate unless the operator is in the seat.

#### **BLADE CARE**

For best results mower blades must be kept sharp. Replace bent or damaged blades.

#### **BLADE REMOVAL (See Fig. 8)**

- Raise mower to highest position to allow access to blades.
- Remove blade bolt, lock washer and flat washer securing blade.
- Install new or resharpened blade with trailing edge up towards deck as shown.

IMPORTANT: TO ENSURE PROPER ASSEMBLY, CENTER HOLE IN BLADE MUST ALIGN WITH STAR ON MANDREL

- Reassemble blade bolt, lock washer and flat washer in exact order as shown.
- Tighten blade bolt securely (27-35 Ft. Lbs. torque).

**IMPORTANT**: BLADE BOLT IS HEATTREATED. IF BOLT NEEDS REPLACING, REPLACE ONLY WITH APPROVE BOLT SHOWN IN THE REPAIR PARTS.

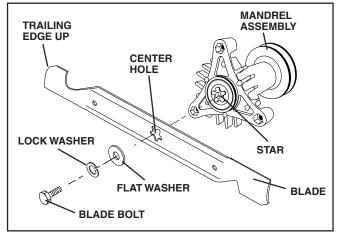


FIG. 8

#### TO SHARPEN BLADE (See Fig. 9)

**NOTE:** We do not recommend sharpening blade - but if you do, be sure the blade is balanced.

Care should be taken to keep the blade balanced. An unbalanced blade will cause excessive vibration and eventual damage to mower and engine.

- The blade can be sharpened with a file or on a grinding wheel. Do not attempt to sharpen while on the mower.
- To check blade balance, you will need a 5/8" diameter steel bolt, pin, or a cone balancer. (When using a cone balancer, follow the instructions supplied with balancer.)

**NOTE:** Do not use a nail for balancing blade. The lobes of the center hole may appear to be centered, but are not.

 Slide blade on to an unthreaded portion of the steel bolt or pin and hold the bolt or pin parallel with the ground.
 If blade is balanced, it should remain in a horizontal position. If either end of the blade moves downward, sharpen the heavy end until the blade is balanced.

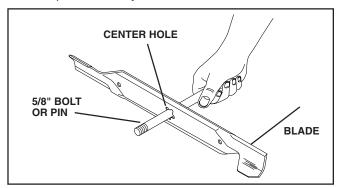


FIG. 9

#### **BATTERY**

Your tractor has a battery charging system which is sufficient for normal use. However, periodic charging of the battery with an automotive charger will extend its life.

- Keep battery and terminals clean.
- Keep battery bolts tight.
- Keep small vent holes open.
- Recharge at 6-10 amperes for 1 hour.

**NOTE:** The original equipment battery on your tractor is maintenance free. Do not attempt to open or remove caps or covers. Adding or checking level of electrolyte is not necessary.

#### TO CLEAN BATTERY AND TERMINALS

Corrosion and dirt on the battery and terminals can cause the battery to "leak" power.

- Disconnect BLACK battery cable first then RED battery cable and remove battery from tractor.
- Rinse the battery with plain water and dry.
- Clean terminals and battery cable ends with wire brush until bright.
- Coat terminals with grease or petroleum jelly.
- Reinstall battery (See "REPLACING BATTERY" in the SERVICE AND ADJUSTMENTS section of this manual).

#### **V-BELTS**

Check V-belts for deterioration and wear after 100 hours of operation and replace if necessary. The belts are not adjustable. Replace belts if they begin to slip from wear.

#### TRANSAXLE COOLING

Keep transaxle free from build-up of dirt and chaff which can restrict cooling.

#### **ENGINE**

#### **LUBRICATION**

Only use high quality detergent oil rated with API service classification SG-SL. Select the oil's SAE viscosity grade according to your expected operating temperature.

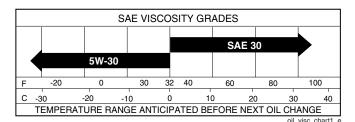


FIG. 10

**NOTE:** Although multi-viscosity oils (5W30, 10W30 etc.) improve starting in cold weather, they will result in increased oil consumption when used above 32°F. Check your engine oil level more frequently to avoid possible engine damage from running low on oil.

Change the oil after every 25 hours of operation or at least once a year if the tractor is not used for 25 hours in one year.

Check the crankcase oil level before starting the engine and after each eight (8) hours of operation. Tighten oil fill cap/dipstick securely each time you check the oil level.

#### TO CHANGE ENGINE OIL (See Figs. 10 and 11)

Determine temperature range expected before oil change. All oil must meet API service classification SG-SL.

- Be sure tractor is on level surface.
- Oil will drain more freely when warm.
- Catch oil in a suitable container.
- Remove oil fill cap/dipstick. Be careful not to allow dirt to enter the engine when changing oil.
- Remove yellow cap from end of drain valve and install the drain tube onto the fitting.

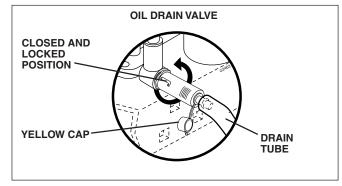


FIG. 11

- Unlock drain valve by pushing inward and turning counterclockwise.
- To open, pull out on the drain valve.
- After oil has drained completely, close and lock the drain valve by pushing inward and turning clockwise until the pin is in the locked position as shown.
- Remove the drain tube and replace the cap onto to the bottom fitting of the drain valve.
- Refill engine with oil through oil fill dipstick tube. Pour slowly. Do not overfill. For approximate capacity see "PRODUCT SPECIFICATIONS" section of this manual.
- Use gauge on oil fill cap/dipstick for checking level.
   Be sure dipstick cap is tightened securely for accurate reading. Keep oil at "FULL" line on dipstick.

#### **CLEAN AIR SCREEN**

Air screen must be kept free of dirt and chaff to prevent engine damage from overheating. Clean with a wire brush or compressed air to remove dirt and stubborn dried gum fibers

#### **ENGINE COOLING SYSTEM (See Fig. 12)**

Debris may clog the engine's air cooling system. Remove blower housing and clean the area shown to prevent overheating and engine damage.

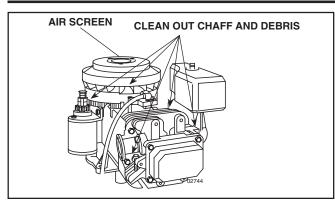


FIG. 12

#### AIR FILTER (See Fig. 13)

Your engine will not run properly using a dirty air filter. Replace pre-cleaner after every 25 hours of operation or every season. Service paper cartridge every 100 hours of operation or every season, whichever occurs first.

Service air cleaner more often under dusty conditions.

- Pull up on air filter cover handle and rotate towards engine.
- Remove cover.
- Carefully remove air filter cartridge and pre-cleaner from base.
- Clean base carefully to prevent debris from falling into carburetor.

**NOTE**: If very dirty or damaged, replace cartridge.

- Place new pre-cleaner and cartridge firmly in base.
- Align tabs on cover with slots in blower housing and replace cover.
- Hook handle on cover and push down on handle to close.

**IMPORTANT:** Petroleum solvents, such as kerosene, are not to be used to clean the cartridge. They may cause deterioration of the cartridge. Do not oil cartridge. Do not use pressurized air to clean cartridge.

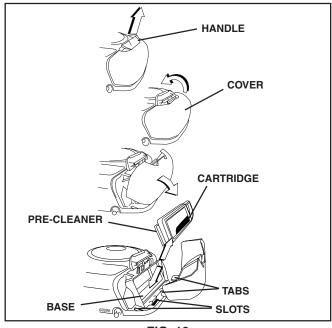


FIG. 13

#### **MUFFLER**

Inspect and replace corroded muffler and spark arrester (if equipped) as it could create a fire hazard and/or damage.

#### SPARK PLUGS

Replace spark plugs at the beginning of each mowing season or after every 100 hours of operation, whichever occurs first. Spark plug type and gap setting are shown in "PRODUCT SPECIFICATIONS" section of this manual.

#### **IN-LINE FUEL FILTER (See Fig. 14)**

The fuel filter should be replaced once each season. If fuel filter becomes clogged, obstructing fuel flow to carburetor, replacement is required.

- With engine cool, remove filter and plug fuel line sections.
- Place new fuel filter in position in fuel line with arrow pointing towards carburetor.
- Be sure there are no fuel line leaks and clamps are properly positioned.
- Immediately wipe up any spilled gasoline.

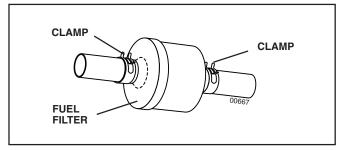


FIG. 14

#### **CLEANING**

- Clean engine, battery, seat, finish, etc. of all foreign matter.
- Keep finished surfaces and wheels free of all gasoline, oil, etc.
- Protect painted surfaces with automotive type wax.

We do not recommend using a garden hose or pressure washer to clean your tractor unless the engine and transmission are covered to keep water out. Water in engine or transmission will shorten the useful life of your tractor. Use compressed air or a leaf blower to remove grass, leaves and trash from tractor and mower.



WARNING: TO AVOID SERIOUS INJURY, BEFORE PERFORMING ANY SERVICE OR ADJUST-MENTS:

- Depress clutch/brake pedal fully and set parking brake.
- Place gearshift lever in neutral (N) position.
- Place attachment clutch in "DISENGAGED" position.
- Turn ignition key to "STOP" and remove key.
- Make sure the blades and all moving parts have completely stopped.
- Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with plug.

#### **TRACTOR**

#### TO REMOVE MOWER (See Fig. 15)

Mower will be easier to remove from the right side of tractor.

- Place attachment clutch in "DISENGAGED" position.
- Move attachment lift lever forward to lower mower to its lowest position.
- · Roll belt off engine pulley.
- Remove small retainer spring, and remove clutch spring off pulley bolt.
- Remove large retainer spring, slide collar off and push housing guide out of bracket.
- Disconnect anti-swaybar from chassis bracket by removing retainer spring.
- Disconnect suspension arms from rear deck brackets by removing retainer springs.
- Disconnect front links from deck by removing retainer springs.

 Raise lift lever to raise suspension arms. Slide mower out from under tractor.

IMPORTANT: IF AN ATTACHMENT OTHER THAN THE MOWER DECK IS TO BE MOUNTED ON THE TRACTOR, REMOVE THE FRONT LINKS AND HOOKTHE CLUTCH SPRING INTO SQUARE HOLE IN FRAME.

#### TO INSTALL MOWER (SEE FIG. 15)

- Raise attachment lift lever to its highest position.
- Slide mower under tractor with deflector shield to right side of tractor.
- Lower lift lever to its lowest position.
- Connect front links to mower deck and secure with retainer springs.
- Connect suspension arms to rear deck brackets and secure with retainer springs.
- Connect anti-swaybar to chassis bracket and secure with retainer spring.

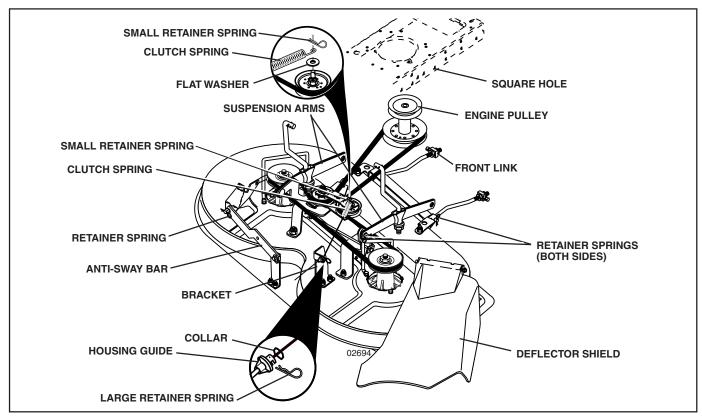


FIG. 15

- Push clutch cable housing guide into bracket, slide collar onto guide and secure with large retainer spring.
- Place flat washer and clutch spring on idler pulley bolt and secure with small retainer spring.
- · Install belt onto engine pulley.

#### TO LEVEL MOWER HOUSING

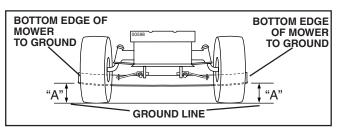
Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated (See "PRODUCT SPECIFICATIONS" section of this manual). If tires are over or underinflated, you will not properly adjust your mower.

SIDE-TO-SIDE ADJUSTMENT (See Figs. 16 and 17)

- Raise mower to its highest position.
- At the midpoint of both sides of mower, measure height from bottom edge of mower to ground. Distance "A" on both sides of mower should be the same or within 1/4" of each other.
- If adjustment is necessary, make adjustment on one side of mower only.
- To raise one side of mower, tighten lift link adjustment nut on that side.
- To lower one side of mower, loosen lift link adjustment nut on that side.

**NOTE**: Three full turns of adjustment nut will change mower height about 1/8".

Recheck measurements after adjusting.



**FIG. 16** 

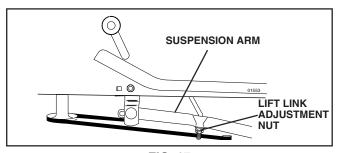


FIG. 17

FRONT-TO-BACK ADJUSTMENT (See Figs. 18 and 19) IMPORTANT: DECK MUST BE LEVEL SIDE-TO-SIDE. IF THE FOLLOWING FRONT-TO-BACK ADJUSTMENT IS NECESSARY, BE SURE TO ADJUST BOTH FRONT LINKS EQUALLY SO MOWER WILL STAY LEVEL SIDE-TO-SIDE.

To obtain the best cutting results, the mower housing should be adjusted so that the front is approximately 1/8" to 1/2" lower than the rear when the mower is in its highest position.

Check adjustment on right side of tractor. Measure distance "D" directly in front and behind the mandrel at bottom edge of mower housing as shown.

- Before making any necessary adjustments, check that both front links are equal in length.
- If links are not equal in length, adjust one link to same length as other link.
- To lower front of mower loosen nut "E" on both front links an equal number of turns.
- When distance "D" is 1/8" to 1/2" lower at front than rear, tighten nuts "F" against trunnion on both front links.
- To raise front of mower, loosen nut "F" from trunnion on both front links. Tighten nut "E" on both front links an equal number of turns. The two front links must remain equal in length.
- When distance "D" is 1/8" to 1/2" lower at front than rear, tighten nut "F" against trunnion on both front links.
- Recheck side-to-side adjustment.

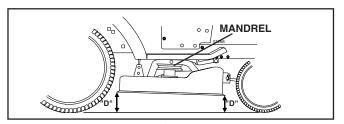


FIG. 18

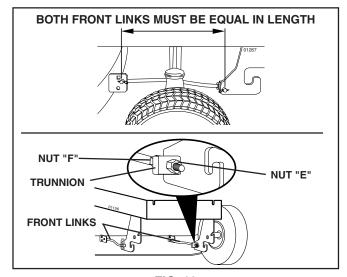


FIG. 19

# TO REPLACE MOWER BLADE DRIVE BELT (See Fig. 20)

The mower blade drive belt may be replaced without tools. Park the tractor on level surface. Engage parking brake.

#### **BELT REMOVAL -**

- Remove mower from tractor (See "TO REMOVE MOWER" in this section of manual).
- Work belt off both mandrel pulleys and idler pulleys.
- Pull belt away from mower.

#### **BELT INSTALLATION -**

- Work belt around both mandrel pulleys and idler pulleys.
- Make sure belt is in all pulley grooves and inside all belt guides.
- Install mower (See "To Install Mower" in this section of manual).

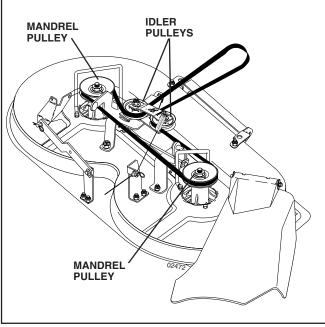


FIG. 20

#### TO CHECK AND ADJUST BRAKE (See Fig. 21)

Your tractor is equipped with an adjustable brake system which is mounted on the right side of the transaxle.

If tractor requires more than five (5) feet to stop at highest speed in highest gear on a level, dry concrete or paved surface, then brake must be checked and adjusted.

#### TO CHECK BRAKE

- Park tractor on a level, dry concrete or paved surface, depress clutch/brake pedal all the way down and engage parking brake.
- Place gear shift lever in neutral (N) position.

The rear wheels must lock and skid when you try to manually push the tractor forward. If the rear wheels rotate, the brake needs to be adjusted or the pads need to be replaced.

#### TO ADJUST BRAKE

- Depress clutch/brake pedal all the way down and engage parking brake.
- Measure distance between brake operating arm and nut "A" on brake rod.
- If distance is other than 1-1/2", loosen jam nut and turn nut "A" until distance becomes 1-1/2". Retighten jam nut against nut "A".
- Road test tractor for proper stopping distance as stated above. Readjust if necessary. If stopping distance is still greater than five (5) feet in highest gear, further maintenance is necessary. Replace brake pads or contact a qualified service center.

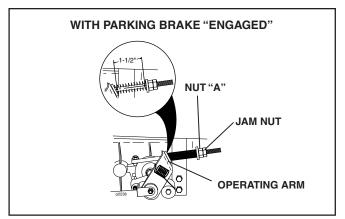


FIG. 21

# TO REPLACE MOTION DRIVE BELT (See Fig. 22)

Park the tractor on level surface. Engage parking brake. For assistance, there is a belt installation guide decal on bottom side of left footrest.

#### **BELT REMOVAL -**

 Remove mower (See "TO REMOVE MOWER" in this section of manual).

**NOTE:** Observe entire motion drive belt and position of all belt guides and keepers.

- Remove belt from stationary idler and clutching idler.
- Remove belt downward from around engine pulley.
- Pull belt slack toward rear of tractor. Remove belt upwards from transaxle pulley by deflecting belt keepers.
- Remove belt from center span keeper and pull belt away from tractor.

#### **BELT INSTALLATION -**

- Carefully work new belt down between transaxle belt keepers and onto the input pulley.
- Slide belt into the center span keeper.
- Pull belt toward front of tractor and roll around the top groove of engine pulley.
- Install belt through stationary idler and clutching idler.
- Make sure belt is in all pulley grooves and inside all belt guides and keepers.
- Install mower (See "TO INSTALL MOWER" in this section of manual).

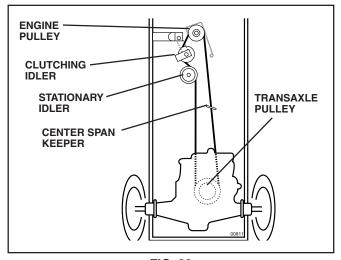


FIG. 22

#### TO ADJUST STEERING WHEEL ALIGN-MENT

If steering wheel crossbars are not horizontal (left to right) when wheels are positioned straight forward, remove steering wheel and reassemble per instructions in the Assembly section of this manual.

#### FRONT WHEEL TOE-IN/CAMBER

The front wheel toe-in and camber are not adjustable on your tractor. If damage has occurred to affect the front wheel toe-in or camber, contact your nearest authorized service center/department.

# TO REMOVE WHEEL FOR REPAIRS (See Fig. 23)

- Block up axle securely.
- Remove axle cover, retaining ring and washers to allow wheel removal (rear wheel contains a square key - Do not lose).
- Repair tire and reassemble.
- On rear wheels only: align grooves in rear wheel hub and axle. Insert square key.
- Replace washers and snap retaining ring securely in axle groove.
- Replace axle cover.

**NOTE:** To seal tire punctures and prevent flat tires due to slow leaks, tire sealant may be purchased from your local parts dealer. Tire sealant also prevents tire dry rot and corrosion.

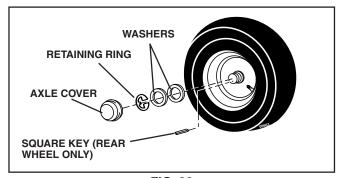


FIG. 23

# TO START ENGINE WITH A WEAK BATTERY (See Fig. 24)



WARNING: Lead-acid batteries generate explosive gases. Keep sparks, flame and smoking materials away from batteries. Always wear eye protection when around batteries.

If your battery is too weak to start the engine, it should be recharged. (See "BATTERY" in the MAINTENANCE section of this manual).

If "jumper cables" are used for emergency starting, follow this procedure:

IMPORTANT: YOUR TRACTOR IS EQUIPPED WITH A 12 VOLT SYSTEM. THE OTHER VEHICLE MUST ALSO BE A 12 VOLT SYSTEM. DO NOT USE YOUR TRACTOR BATTERY TO START OTHER VEHICLES.

#### TO ATTACH JUMPER CABLES -

- Connect one end of the RED cable to the POSITIVE (+) terminal of each battery(A-B), taking care not to short against tractor chassis.
- Connect one end of the BLACK cable to the NEGATIVE
   (-) terminal (C) of fully charged battery.
- Connect the other end of the BLACK cable (D) to good chassis ground, away from fuel tank and battery.

#### TO REMOVE CABLES, REVERSE ORDER -

- BLACK cable first from chassis and then from the fully charged battery.
- RED cable last from both batteries.

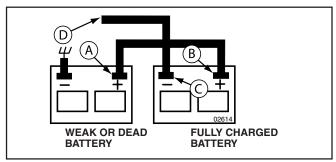


FIG. 24

#### **REPLACING BATTERY (See Figs. 25 and 26)**



WARNING: Do not short battery terminals by allowing a wrench or any other object to contact both terminals at the same time. Before connecting battery, remove metal bracelets, wristwatch bands, rings, etc. Positive terminal must be connected first to prevent sparking from accidental grounding.

- Lift seat pan to raised position.
- Disconnect BLACK battery cable first then RED battery cable and carefully remove battery from tractor.
- Install new battery with terminals in same position as old battery.
- First connect RED battery cable to positive (+) terminal with hex bolt and keps nut as shown. Tighten securely. Slide terminal cover over terminal.
- Connect BLACK grounding cable to negative (-) terminal with remaining hex bolt and keps nut. Tighten securely.

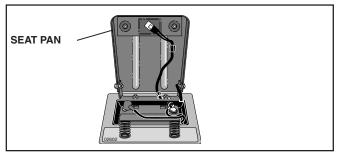


FIG. 25

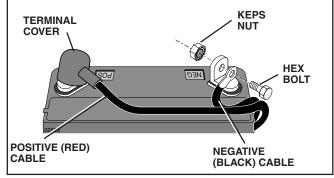


FIG. 26

#### **INTERLOCKS AND RELAYS**

Loose or damaged wiring may cause your tractor to run poorly, stop running, or prevent it from starting.

 Check wiring. See electrical wiring diagram in the Repair Parts section.

#### TO REPLACE FUSE

Replace with 20 amp automotive-type plug-in fuse. The fuse holder is located behind the dash.

# TO REMOVE HOOD AND GRILL ASSEMBLY (See Fig. 27)

- Raise hood.
- Stand in front of tractor. Grasp hood at sides, tilt toward engine and lift off of tractor.
- To replace, reverse above procedure.

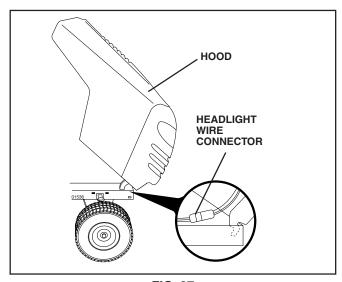


FIG. 27

#### **ENGINE**

**TO ADJUSTTHROTTLE CONTROL CABLE** The throttle control has been preset at the factory and adjustment should not be necessary. If adjustment is necessary, see engine manual.

#### TO ADJUST CARBURETOR

The carburetor has been preset at the factory and adjustment should not be necessary. However, minor adjustment may be required to compensate for differences in fuel, temperature, altitude or load. If the carburetor does need adjustment, see engine manual.

## **STORAGE**

Immediately prepare your tractor for storage at the end of the season or if the tractor will not be used for 30 days or more.



WARNING: Never store the tractor with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.

#### **TRACTOR**

Remove mower from tractor for winter storage. When mower is to be stored for a period of time, clean it thoroughly, remove all dirt, grease, leaves, etc. Store in a clean, dry area.

- Clean entire tractor (See "CLEANING" in the Maintenance section of this manual).
- Inspect and replace belts, if necessary (See belt replacement instructions in the Service and Adjustments section of this manual).
- Lubricate as shown in the Maintenance section of this manual.
- Be sure that all nuts, bolts and screws are securely fastened. Inspect moving parts for damage, breakage and wear. Replace if necessary.
- Touch up all rusted or chipped paint surfaces; sand lightly before painting.

#### **BATTERY**

- Fully charge the battery for storage.
- After a period of time in storage, battery may require recharging.
- To help prevent corrosion and power leakage during long periods of storage, battery cables should be disconnected and battery cleaned thoroughly (see "TO CLEAN BATTERY AND TERMINALS" in the Maintenance section of this manual).
- After cleaning, leave cables disconnected and place cables where they cannot come in contact with battery terminals.
- If battery is removed from tractor for storage, do not store battery directly on concrete or damp surfaces.

#### **ENGINE**

#### **FUEL SYSTEM**

IMPORTANT: IT IS IMPORTANT TO PREVENT GUM DEPOSITS FROM FORMING IN ESSENTIAL FUEL SYSTEM PARTS SUCH AS CARBURETOR, FUEL FILTER, FUEL HOSE, OR TANK DURING STORAGE. ALSO, EXPERIENCE INDICATES THAT ALCOHOL BLENDED FUELS (CALLED GASOHOL OR USING ETHANOL OR METHANOL) CAN ATTRACT MOISTURE WHICH LEADS TO SEPARATION AND FORMATION OF ACIDS DURING STORAGE. ACIDIC GAS CAN DAMAGE THE FUEL SYSTEM OF AN ENGINE WHILE IN STORAGE.

- Empty the fuel tank by starting the engine and let it run until the fuel lines and carburetor are empty.
- Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.
- Use fresh fuel next season.

**NOTE:** Fuel stabilizer is an acceptable alternative in minimizing the formation of fuel gum deposits during storage. Add stabilizer to gasoline in fuel tank or storage container. Always follow the mix ratio found on stabilizer container. Run engine at least 10 minutes after adding stabilizer to allow the stabilizer to reach the carburetor. Do not empty the gas tank and carburetor if using fuel stabilizer.

#### **ENGINE OIL**

Drain oil (with engine warm) and replace with clean engine oil. (See "ENGINE" in the Maintenance section of this manual).

#### CYLINDER(S)

- Remove spark plug(s).
- Pour one ounce of oil through spark plug hole(s) into cylinder(s).
- Turn ignition key to "START" position for a few seconds to distribute oil.
- Replace with new spark plug(s).

#### OTHER

- Do not store gasoline from one season to another.
- Replace your gasoline can if your can starts to rust.
   Rust and/or dirt in your gasoline will cause problems.
- If possible, store your tractor indoors and cover it to give protection from dust and dirt.
- Cover your tractor with a suitable protective cover that does not retain moisture. Do not use plastic. Plastic cannot breathe which allows condensation to form and will cause your tractor to rust.

**IMPORTANT**: NEVER COVERTRACTOR WHILE ENGINE AND EXHAUST AREAS ARE STILL WARM.

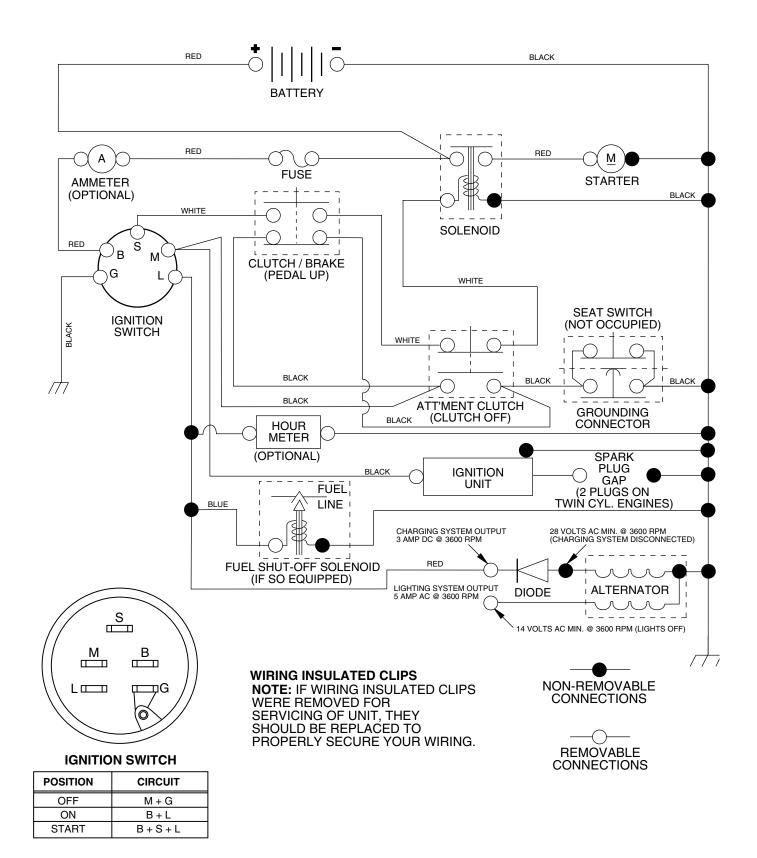
# TROUBLESHOOTING POINTS

PROBLEM	CAUSE	CORRECTION
Will not start	<ol> <li>Out of fuel.</li> <li>Engine not "CHOKED" properly.</li> <li>Engine flooded.</li> <li>Bad spark plug.</li> <li>Dirty air filter.</li> <li>Dirty fuel filter.</li> <li>Water in fuel.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> <li>Engine valves out of adjustment.</li> </ol>	<ol> <li>Fill fuel tank.</li> <li>See "TO START ENGINE" in Operation section.</li> <li>Wait several minutes before attempting to start.</li> <li>Replace spark plug.</li> <li>Clean/replace air filter.</li> <li>Replace fuel filter.</li> <li>Empty fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service Adjustments section.</li> <li>Contact an authorized service center/department.</li> </ol>
Hard to start	<ol> <li>Dirty air filter.</li> <li>Bad spark plug.</li> <li>Weak or dead battery.</li> <li>Dirty fuel filter.</li> <li>Stale or dirty fuel.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> <li>Engine valves out of adjustment.</li> </ol>	<ol> <li>Clean/replace air filter.</li> <li>Replace spark plug.</li> <li>Recharge or replace battery.</li> <li>Replace fuel filter.</li> <li>Empty fuel tank and refill tank with fresh, clean gasoline.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service Adjustments section.</li> <li>Contact an authorized service center/department.</li> </ol>
Engine will not turn over	<ol> <li>Clutch/brake pedal not depressed.</li> <li>Attachment clutch is engaged.</li> <li>Weak or dead battery.</li> <li>Blown fuse.</li> <li>Corroded battery terminals.</li> <li>Loose or damaged wiring.</li> <li>Faulty ignition switch.</li> <li>Faulty solenoid or starter.</li> <li>Faulty operator presence switch(es).</li> </ol>	<ol> <li>Depress clutch/brake pedal.</li> <li>Disengage attachment clutch.</li> <li>Recharge or replace battery.</li> <li>Replace fuse.</li> <li>Clean battery terminals.</li> <li>Check all wiring.</li> <li>Check/replace ignition switch.</li> <li>Check/replace solenoid or starter.</li> <li>Contact an authorized service center/department.</li> </ol>
Engine clicks but will not start	Weak or dead battery.     Corroded battery terminals.     Loose or damaged wiring.     Faulty solenoid or starter.	<ol> <li>Recharge or replace battery.</li> <li>Clean battery terminals.</li> <li>Check all wiring.</li> <li>Check/replace solenoid or starter.</li> </ol>
Loss of power	1. Cutting too much grass/too fast. 2. Throttle in "CHOKE" position. 3. Build-up of grass, leaves and trash under mower. 4. Dirty air filter. 5. Low oil level/dirty oil. 6. Faulty spark plug. 7. Dirty fuel filter. 8. Stale or dirty fuel. 9. Water in fuel. 10. Spark plug wire loose. 11. Dirty engine air screen/fins. 12. Dirty/clogged muffler. 13. Loose or damaged wiring. 14. Carburetor out of adjustment. 15. Engine valves out of adjustment.	<ol> <li>Raise cutting height/reduce speed.</li> <li>Adjust throttle control.</li> <li>Clean underside of mower housing.</li> <li>Clean/replace air filter.</li> <li>Check oil level/change oil.</li> <li>Clean and regap or change spark plug.</li> <li>Replace fuel filter.</li> <li>Empty fuel tank and refill tank with fresh, clean gasoline.</li> <li>Empty fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter.</li> <li>Connect and tighten spark plug wire.</li> <li>Clean engine air screen/fins.</li> <li>Clean/replace muffler.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service Adjustments section.</li> <li>Contact an authorized service center/department.</li> </ol>
Excessive vibration	Worn, bent or loose blade.    Bent blade mandrel.    Loose/damaged part(s).	Replace blade. Tighten blade bolt.     Replace blade mandrel.     Tighten loose part(s). Replace damaged parts.

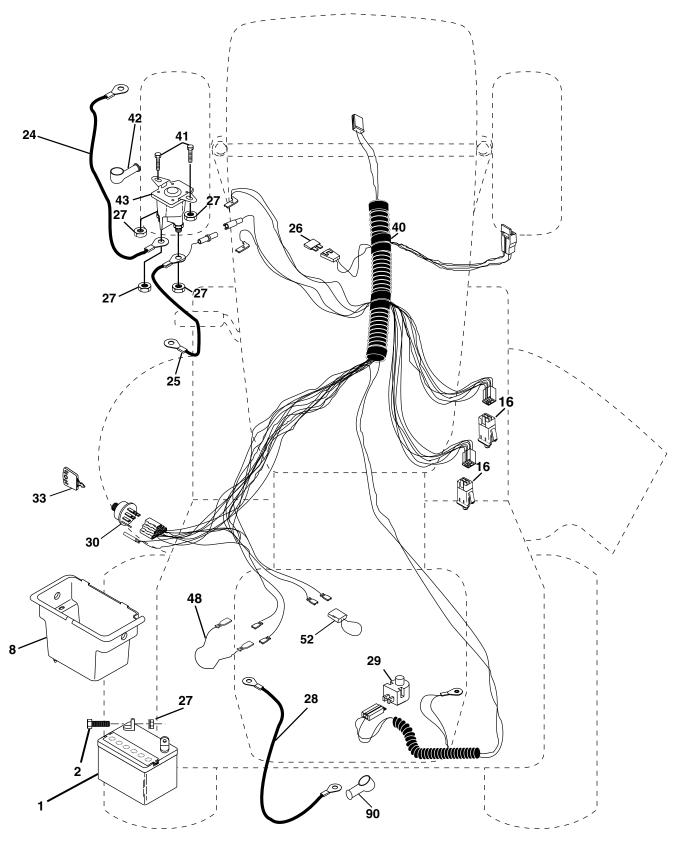
# **TROUBLESHOOTING POINTS**

PROBLEM	CAUSE	CORRECTION
Engine continues to run when operator leaves seat with attachment clutch engaged	Faulty operator-safety presence control system.	Check wiring, switches and connections. If not corrected, contact an authorized service center/department.
Poor cut - uneven	<ol> <li>Worn, bent or loose blade.</li> <li>Mower deck not level.</li> <li>Buildup of grass, leaves, and trash under mower.</li> <li>Bent blade mandrel.</li> <li>Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.</li> </ol>	<ol> <li>Replace blade. Tighten blade bolt.</li> <li>Level mower deck.</li> <li>Clean underside of mower housing.</li> <li>Replace blade mandrel.</li> <li>Clean around mandrels to open vent holes.</li> </ol>
Mower blades will not rotate	<ol> <li>Obstruction in clutch mechanism.</li> <li>Worn/damaged mower drive belt.</li> <li>Frozen idler pulley.</li> <li>Frozen blade mandrel.</li> </ol>	<ol> <li>Remove obstruction.</li> <li>Replace mower drive belt.</li> <li>Replace idler pulley.</li> <li>Replace blade mandrel.</li> </ol>
Poor grass discharge	<ol> <li>Engine speed too slow.</li> <li>Travel speed too fast.</li> <li>Wet grass.</li> <li>Mower deck not level.</li> <li>Low/uneven tire air pressure.</li> <li>Worn, bent or loose blade.</li> <li>Buildup of grass, leaves and trash under mower.</li> <li>Mower drive belt worn.</li> <li>Blades improperly installed.</li> <li>Improper blades used.</li> <li>Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.</li> </ol>	<ol> <li>Place throttle control in "FAST" position.</li> <li>Shift to slower speed.</li> <li>Allow grass to dry before mowing.</li> <li>Level mower deck.</li> <li>Check tires for proper air pressure.</li> <li>Replace/sharpen blade. Tighten blade bolt.</li> <li>Clean underside of mower housing.</li> <li>Replace mower drive belt.</li> <li>Reinstall blades sharp edge down.</li> <li>Replace with blades listed in this manual.</li> <li>Clean around mandrels to open vent holes.</li> </ol>
Headlight(s) not working (if so equipped)	<ol> <li>Switch is "OFF".</li> <li>Bulb(s) or lamp(s) burned out.</li> <li>Faulty light switch.</li> <li>Loose or damaged wiring.</li> <li>Blown fuse.</li> </ol>	<ol> <li>Turn switch "ON".</li> <li>Replace bulb(s) or lamp(s).</li> <li>Check/replace light switch.</li> <li>Check wiring and connections.</li> <li>Replace fuse.</li> </ol>
Battery will not charge	<ol> <li>Bad battery cell(s).</li> <li>Poor cable connections.</li> <li>Faulty regulator (if so equipped).</li> <li>Faulty alternator.</li> </ol>	<ol> <li>Replace battery.</li> <li>Check/clean all connections.</li> <li>Replace regulator.</li> <li>Replace alternator.</li> </ol>
Engine "backfires" when turning engine "OFF"	Engine throttle control not set between half and full speed (fast) position before stopping engine.	Move throttle control between half and full speed (fast) position before stopping engine.

TRACTOR - - MODEL NUMBER MC1136 (MC1136B), PRODUCT NO. 964 77 30-01 SCHEMATIC



TRACTOR - - MODEL NUMBER MC1136 (MC1136B), PRODUCT NO. 964 77 30-01 ELECTRICAL

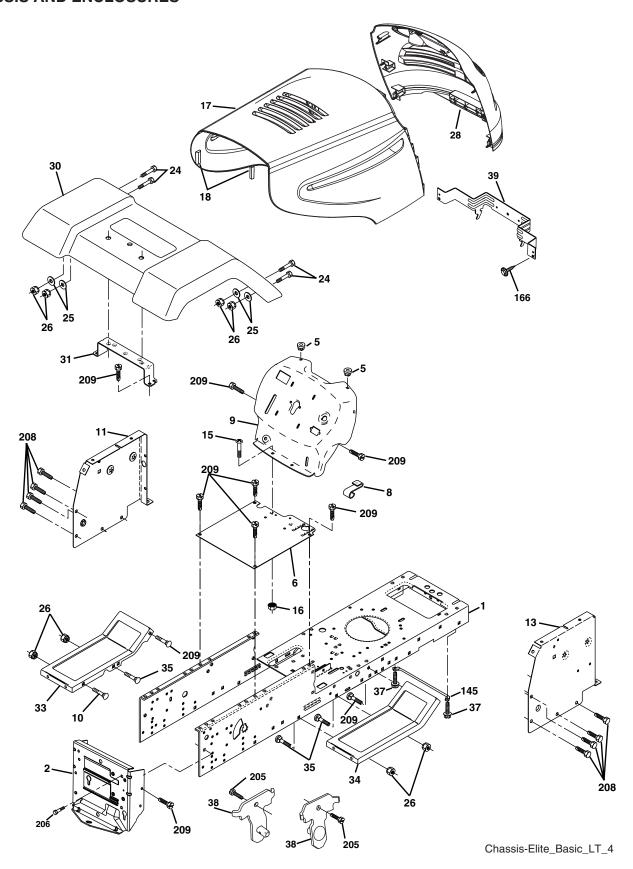


TRACTOR - - MODEL NUMBER MC1136 (MC1136B), PRODUCT NO. 964 77 30-01 ELECTRICAL

KEY NO.		DESCRIPTION
1 2 8 16 24 25 26 27 28 29 30 33 40 41 42 43 48 52 90	874 76 04-12 532 17 66-89 532 17 61-38 532 00 47-99 532 14 61-47 532 17 51-58 873 51 04-00 532 12 47-73 532 12 13-05 532 17 55-67 532 14 04-01 532 17 97-30 871 11 04-08 532 13 15-63 532 17 88-61 532 14 08-44 532 14 19-40	Switch Interlock Push-In Cable Battery 6 Ga. 44"/16W Cable Battery Fuse Nut Keps Hex 1/4-20 Unc Cable Ground 6 Ga 12"black Switch Plunger Nc Gray Switch Ign Key Ign Harness Ign Bolt Blk Fin Hex 1/4-20 Cover Terminal Red

**NOTE:** All component dimensions given in U. S. inches 1 inch = 25.4 mm.

TRACTOR - - MODEL NUMBER MC1136 (MC1136B), PRODUCT NO. 964 77 30-01 CHASSIS AND ENCLOSURES

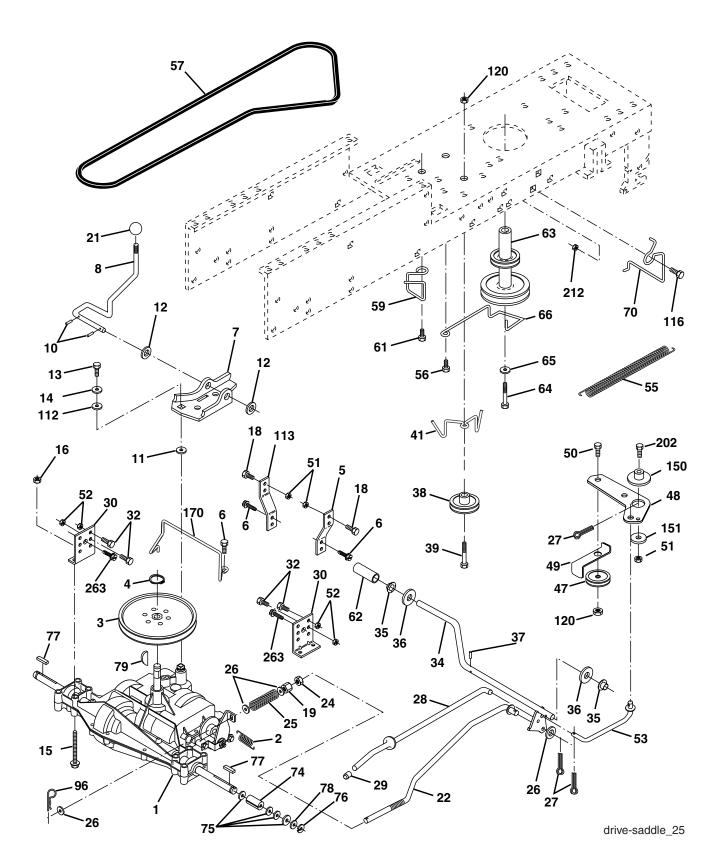


# TRACTOR - - MODEL NUMBER MC1136 (MC1136B), PRODUCT NO. 964 77 30-01 CHASSIS AND ENCLOSURES

	PART NO.	DESCRIPTION
	NO.  532 17 46-20 532 17 65-54 532 15 52-72 532 18 12-71 532 15 51-38 532 19 39-34 872 14 06-08 532 17 49-96 532 18 69-52 874 18 05-12 873 51 05-00 532 18 58-47 532 12 69-38	Chassis Drawbar Bumper, Hood/Dash Saddle Clip Retainer Slide-On Dash Bolt, Carriage 3/8-16 x 1 Panel Dash LH Panel Slkscr Dash RH Screw Mach TRHD 5/16-18uncx3/4 Nut Keps 5/16-18 Unc
25 26 28 30 31 33 34 35 37 38 39 145 166 205 206 208 209	819 13 13-12 873 80 06-00 532 18 67-18 532 18 12-72 532 13 66-19 532 18 30-81 532 18 30-80 872 11 06-06 817 49 05-08 532 17 57-10 532 17 47-14 532 15 65-24 532 17 18-75 817 49 06-08 532 17 01-65 817 67 06-08 817 00 06-12 532 00 54-79 <b>532 19 39-35</b>	Washer 13/32 x 13/16 x 12 Ga Nut Lock Hex w/Ins 3/8-16 Unc Grille

**NOTE:** All component dimensions given in U.S. inches 1 inch = 25.4 mm.

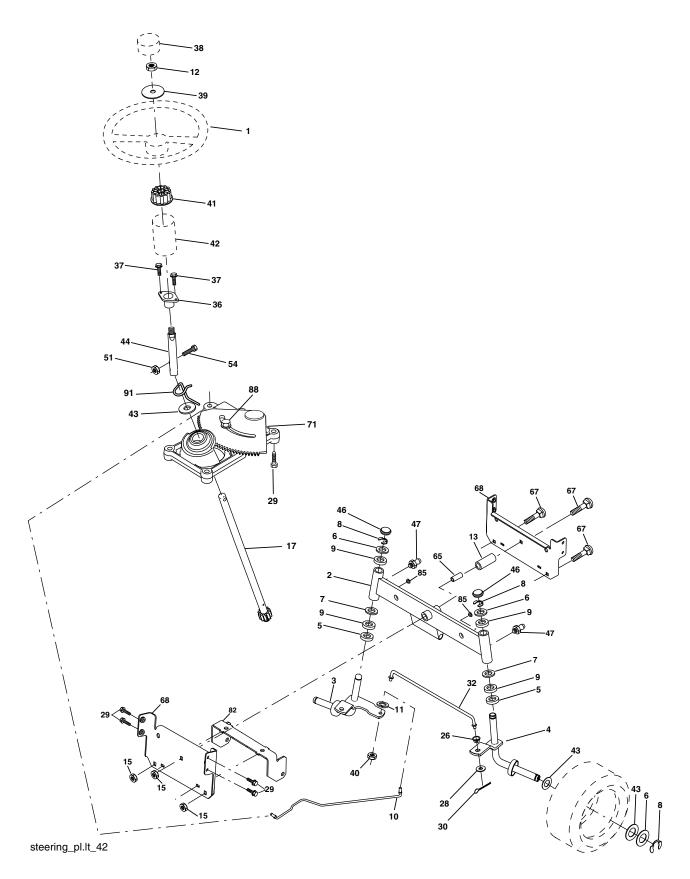
TRACTOR - - MODEL NUMBER MC1136 (MC1136B), PRODUCT NO. 964 77 30-01 DRIVE



# TRACTOR - - MODEL NUMBER MC1136 (MC1136B), PRODUCT NO. 964 77 30-01 DRIVE

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
	532 14 66-82 532 12 36-66 812 00 00-28 532 12 15-20 817 00 05-12 532 16 22-40 532 13 16-79 876 02 04-16 532 10 57-01 819 15 12-16 874 55 04-12 810 04 04-00 874 49 05-44 873 80 05-00 874 78 06-16 873 80 06-00 532 10 69-33	Transaxle, Peerless 204-506B (Order parts from transaxle manufacturer) 2 Spring Return Brake T/a Zinc 3 Pulley Transaxle 18" tires 3 Ring Retainer # 5100-62 3 Strap Torque 30 Degrees 2 Screw 5/16-18 x 3/4 3 Bracket T/A Saddle Shift 4 Rod Shifter 5 Pin Cotter 1/8 x 1 Cad Washer Plate Shf 388 Sq Hole 5 Washer 15/32 x 3/4 x 16 Ga. 2 Bolt 1/4-28 Unf Gr 8 W/Patch 3 Washer Lock Hvy Helical 1/4 4 Bolt 5/16-18 Gr. 5 5 Nut Lock Hx W/Ins 5/16-18 Unc 6 Bolt, Fin Hex 3/8-16 Unc x 1 Gr. 5 5 Nut Lock 3/8-16 Unc	NO. 49 50 51 52 53 55 56 57 59 61 62 63 64 65 66 70 74 75 76 77	NO.  532 12 32-05 872 11 06-12 873 68 06-00 873 68 05-00 532 10 57-10 532 10 57-09 817 06 06-20 532 13 08-01 532 16 96-91 817 12 06-14 532 12 48-72 532 17 54-10 532 17 39-37 810 04 07-00 532 15 47-78 532 13 46-83 532 13 70-57 532 12 17-49 812 00 00-01 532 12 35-83	Retainer Belt Style Spring Bolt Carr Sh 3/8-16 x 1-1/2 Gr. 5 Nut Crownlock 3/8-16 Unc Nut Crownlock 5/16-18 Unc Link Clutch Spring Return Clutch 6 75 Screw 3/8-16 x 1-1/4 V-Belt Ground Drive Keeper Belt Span Ctr Screw 3/8-16 x .875 Cover Pedal Blk Round Engine Pulley Bolt Hex Washer Lock Hvy Hlcl Spr 7/16 Keeper Belt Engine Foolproof Guide Belt Mower Drive RH Spacer Axle Washer 25/32 x 1 1/4 x 16 Ga. E-ring #5133-75 Key Square 2 0 x 1845/ 1865
24 25 26	873 35 06-00 532 10 68-88 819 13 13-16	Nut Hex Jam 3/8-16 Unc S Spring Rod Brake 2 00 Zinc S Washer 13/32 x 13/16 x 16 Ga	78 79 96 112	532 12 50-96 532 12 47-88	Washer 25/32 x 1-5/8 x 16 Ga. Key Woodruff Retainer Spring 1" Washer 9/32 x 3/4 x 10 Ga.
27 28 29 30 32 34	532 17 57-65 532 07 16-73 532 17 49-73 874 76 05-12	<ul> <li>Pin Cotter 1/8 x 3/4 Cad</li> <li>Rod Brake Parking</li> <li>Cap Brake Parking</li> <li>Bracket Mtg Transaxle</li> <li>Bolt Hex Hd 5/16-18 Unc x 3/4</li> <li>Shaft Asm Pedal Foot</li> </ul>	113 116 120 150 151	532 12 72-85 872 14 06-08 873 90 06-00 532 17 54-56 819 13 32-10	Strap Torque Lh Bolt Rdhd Sq Neck 3/8-16 x 1.00 Nut Lock Flg 3/8-16 Spacer Retainer Washer 13/32 x 2 x 10
35 36 37 38 39	532 12 01-83 819 21 16-16 532 12 49-63 532 17 91-14	B Bearing Nylon Blk 629 Id B Washer 21/32 x 1 x 16 Ga B Pin Roll 3/16 x 1" Pulley Idler Composite B Bolt Rdhd 3/8-16 x 2-3/4 Gr. 5	170 202 212 263 275	872 11 06-14 532 14 52-12	Keeper Belt T/A Bolt, 3/8 - 16 x 1-3/4 Gr. 5 Nut Flange Hex Lock Screw 3/8-16 x 3/4 Nut 3/8-16
41 47 48	532 12 77-83	6 Keeper Belt Retainer Idler 8 Pulley Idler V Groove Plastic 7 Bellcrank Asm	NOTE	E: All compon 1 inch = 25	ent dimensions given in U.S. inches .4 mm

TRACTOR - - MODEL NUMBER MC1136 (MC1136B), PRODUCT NO. 964 77 30-01 STEERING

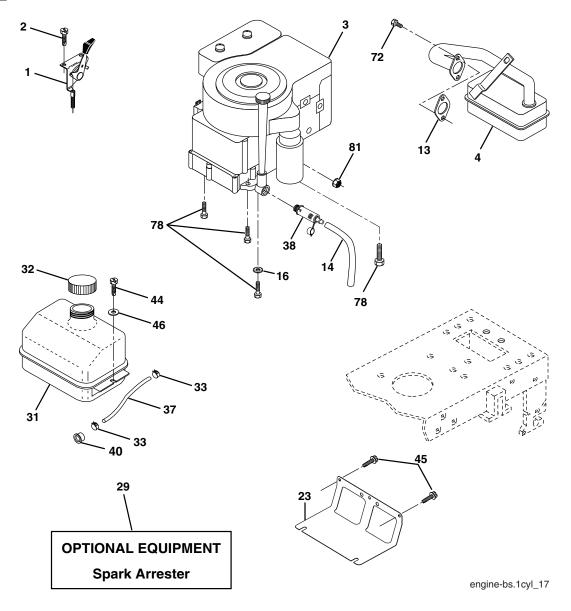


# TRACTOR - - MODEL NUMBER MC1136 (MC1136B), PRODUCT NO. 964 77 30-01 STEERING

KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11 2 3 15 17 26 8 29 30 32 6 37 38 39 40 14 2 3 44 46 47 51 46 65 67 88 91 82 85 88 91	532 17 51-31 532 16 98-40 532 16 98-39 532 12 49-31 532 12 17-48 819 27 20-16 812 00 00-29 532 12 49-37 532 17 51-21 810 04 06-00 873 94 08-00 532 13 65-18 532 14 52-12 532 18 06-41 532 12 68-47 819 13 14-16 817 00 06-12 876 02 04-12 532 13 04-65 532 15 50-99 532 15 29-27 532 19 29-16 819 18 38-12 873 54 06-00 532 18 67-37 532 16 96-33 532 12 17-49 532 18 06-40 532 18 32-26 873 54 04-00 871 13 04-20 532 16 98-27 532 16 98-27 532 16 98-35 532 13 38-35	Spindle Asm LH Spindle Asm RH Bearing Race Thrust Harden Washer 25/32 x 1-5/8 x 16 Ga. Washer 27/32 x 1-1/4 x 16 Ga. Ring Klip #t5304-75 Bearing Col Strg Blk Link Drag Washer Lock Hvy Hlcl Spr 3/8 Nut Hex Jam Toplock 1/2-20 Spacer earing Axle Front Hexflange Lock Shaft Asm Strg Bushing Link Drag Blk LR Washer 13/32 x 7/8 x 16 Ga. Screw 3/8-16 x 3/4 Pin Cotter 1/8 x 3/4 Cad Rod Tie Wire Form 19 75 Mech Bushing Strg 5/8 ld Dash Screw Cap Wheel Steer Washer 9/16 ID x 2-3/8 OD 12 Ga. Nut Crownlock 3/8-24 Adaptor Wheel Strg Boot Steering Washer 25/32 x 1 1/4 x 16 Ga. Extension Steering Cap Spindle Fr Top Blk Fitting Grease Nut Crownlock 1/4-28 Bolt Hex 1/4-28 Unf x 1-1/4 Gr. 8 Spacer Brace Axle Bolt 3/8-16 x 2-1/4 Brace Axle Steering Asm Bracket Susp Chassis Front Fastener Christmas Tree Bolt shoulder 7/16-20
	NO.  1 2 3 4 5 6 7 8 9 10 11 12 3 3 6 7 8 9 10 11 12 3 3 6 3 7 3 8 3 9 4 0 4 1 4 2 4 3 4 4 6 4 7 5 1 5 4 6 5 6 7 6 8 7 1 8 2 8 5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	NO.         NO.           1         532 18 67-80           2         532 17 51-31           3         532 16 98-40           4         532 16 98-39           5         532 12 49-31           6         532 12 17-48           7         819 27 20-16           8         812 00 00-29           9         532 12 49-37           10         532 17 51-21           11         810 04 06-00           12         873 94 08-00           13         532 13 65-18           15         532 14 52-12           17         532 18 06-41           26         532 12 68-47           28         819 13 14-16           29         817 00 06-12           30         876 02 04-12           30         876 02 04-12           31         532 15 50-99           37         532 15 29-27           38         532 19 29-16           39         819 18 38-12           40         873 54 06-00           41         532 18 67-37           42         532 16 96-33           43         532 12 17-49           44         532 18 06-40

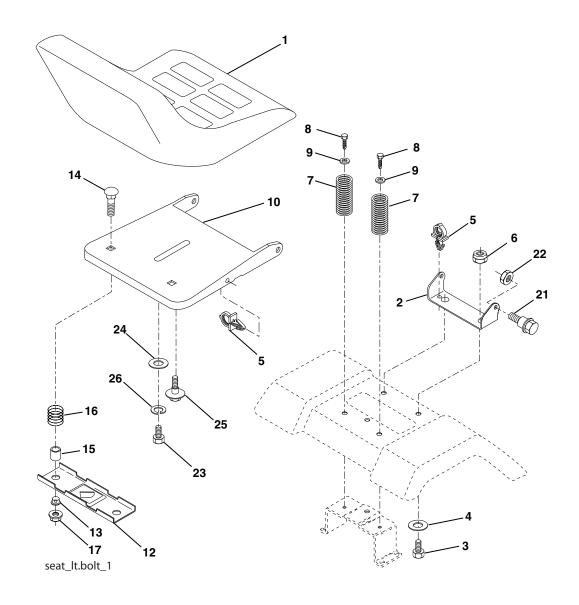
**NOTE:** All component dimensions given in U.S. inches 1 inch = 25.4 mm.

# TRACTOR - - MODEL NUMBER MC1136 (MC1136B), PRODUCT NO. 964 77 30-01 ENGINE



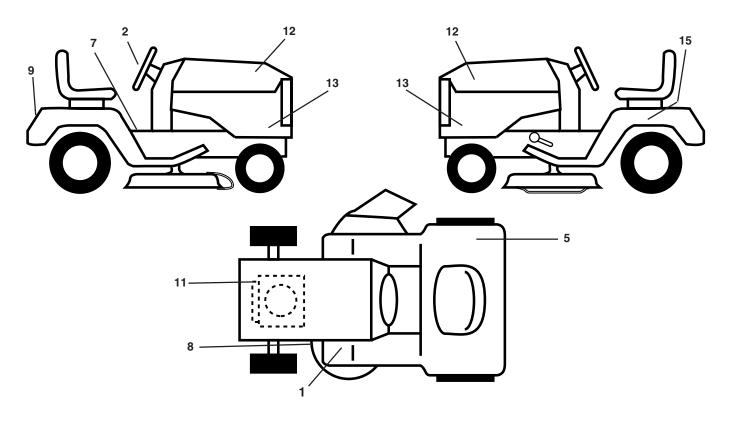
KEY	PART		<b>KEY</b>	PART	
NO.	NO.	DESCRIPTION	NO.	NO.	DESCRIPTION
1 2 3		Control Throttle/Choke Flag Screw Hex Thd Cut 1/4-20 x 1/2 Engine, B&S Model No. <b>217707</b> (Order parts from engine manufacturer)	33 37 38 40 44	532 18 16-54 532 12 40-28	Clamp Hose Line Fuel 20" Plug Drain Oil Easy Bushing Snap NYL BLK Fuel Line Screw Thdrol 1/4-20 x 3/4
4	532 17 97-58	/	45		Screw Hex Wsh Thdrol 3/8-16
13	532 16 52-91	Gasket Muffler	46	819 09 14-16	Washer 9/32 x 7/8 x 16 Ga.
14	532 14 84-56	Tube Drain Oil Easy	72	532 18 39-06	Screw 5/16-18 x 1
16	811 05 06-00	Washer Lock Ext Tooth 3/8	78	817 06 06-20	Screw 3/8-16 x 1-1/4
23	532 16 98-37	Shield BRN/DBR Guard	81	873 51 04-00	Nut Keps Hex 1/4-20 Unc
29 31 32	532 18 51-15	Kit Spark Arrestor (Flat Scrn) Tank Fuel Front Cap Asm Fuel	NOTE	: All compon 1 inch = 25.	ent dimensions given in U.S. inches 4 mm

# TRACTOR - - MODEL NUMBER MC1136 (MC1136B), PRODUCT NO. 964 77 30-01 SEAT



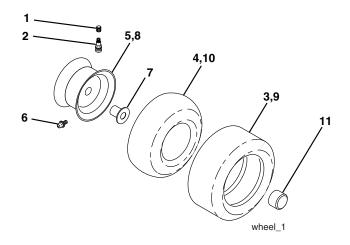
KEY	PART		<b>KEY</b>	PART	
NO.	NO.	DESCRIPTION	NO.	NO.	DESCRIPTION
1	532 17 53-89	Seat	14	872 05 04-12	Bolt Rdhd Sht Nk 1/4 - 20 x 1 -1/2
2	532 14 05-51	Bracket Seat Pivot	15	532 13 43-00	Spacer Split .28 x .96
3	871 11 06-16	6 Bolt Hex 3/8 - 16 x 1	16	532 12 12-50	Spring Cprsn
4	819 13 16-10	) Washer 13/32 x 1 x 10 Ga.	17	532 12 39-76	Nut Lock 1/4 Lge Flg
5	532 14 50-06	Clip Push-In Hinged	21	532 17 18-52	Bolt Shoulder 5/16-18 Unc-2A
6	873 80 06-00	Nut Lock Hex w/lns 3/8 - 16	22	873 80 05-00	Nut Lock Hex w/Ins 5/16 - 18
7	532 12 41-81	Spring Seat Cprsn 2 250 Blk Zi	23	871 11 08-14	Bolt Hex Black
8		S Screw 3/8-16 x 1.5	24	819 17 19-12	Washer 17/32 x 1-3/16 x 12 Ga.
9	819 13 16-14	Washer 13/32 x 1 x 14 Ga.	25	532 12 70-18	Bolt Shoulder 5/16-18 x .62
10	532 18 24-93	Pan Pnt Seat (Blk)	26	810 04 08-00	Washer Lock Hvy Hlcl Spr 1/2
12 13		B Bracket Pnt Mounting Switch B Bushing Snap Blk Nyl	NOTE	: All compon 1 inch = 25.	ent dimensions given in U.S. inches 4 mm.

TRACTOR - - MODEL NUMBER MC1136 (MC1136B), PRODUCT NO. 964 77 30-01 DECALS



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2 5 7 8	532 18 58-81 532 16 88-69 532 15 70-02	Decal, Clutch/Brake Decal, Steering Wheel Decal, Tick Mark Decal, Finger Danger Decal, V-Belt Sch.	9 11 12 13 15	<b>532 18 48-53</b> 532 18 90-24 <b>532 19 40-76</b> 532 14 50-05 532 13 83-11	Decal, Fender Decal, Engine Decal, Hood RH/LH Decal, 36/11.5/4 Decal, Caution, Battery Decal, Handle Lft Height Adj. Manual, Owner's

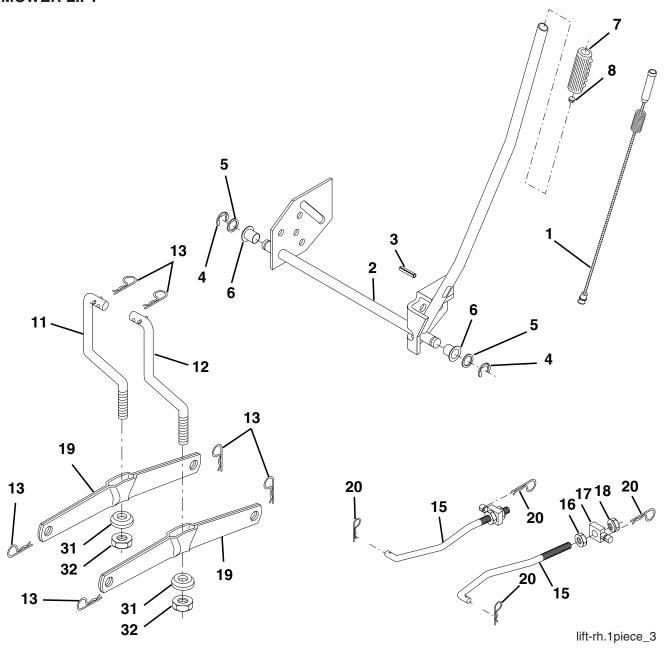
#### **WHEELS & TIRES**



KEY NO.	PART NO.	DESCRIPTION
1		Cap, Tire valve
2	532 06 51-39	
3	532 12 41-57	Tire, Front
4	532 05 99-04	Tube, Front (Service item only)
5		Rim assembly, 6"front
6	532 12 49-57	Fitting, Grease (Front wheel only)
7	532 12 49-59	Bearing, Flange (Front wheel only)
8	532 18 33-38	Rim assembly, 8" rear
9	532 12 39-69	Tire, Rear
10	532 12 49-26	Tube, Rear (Service item only)
11	532 17 50-39	Cap, Hub Axle
	532 14 43-34	Sealant, Tire (10 oz. Tube)

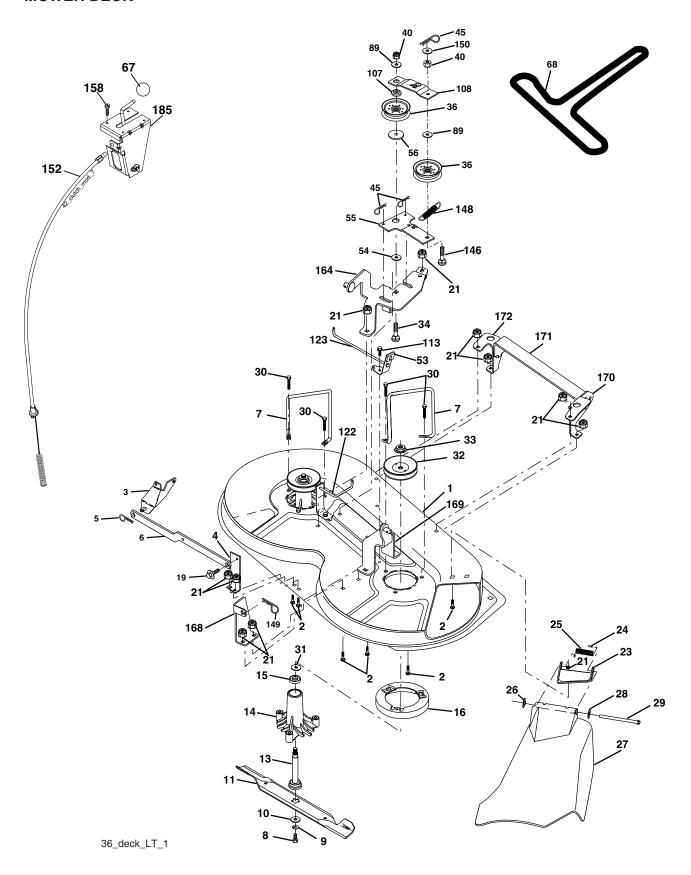
**NOTE:** All component dimensions given in U.S. inches 1 inch = 25.4 mm

TRACTOR - - MODEL NUMBER MC1136 (MC1136B), PRODUCT NO. 964 77 30-01 MOWER LIFT



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1		Wire Asm Inner/Sprg w/plunger	15	532 17 32-88	
2 3	532 15 94-76	Shaft Asm Lift RH Pin Groove	16 17	532 17 56-89	Nut Jam Hex 1/2-13 Unc Trunnion
4	812 00 00-02	P. E Ring #5133-62	18	873 80 08-00	Nut Lockw/Wsh 1/2-13 Unc
5	819 21 16-21	Washer 21/32 x 1 x 21 Ga.	19		Arm Suspension Rear
6		B Bearing Nylon Blk 629 Id	20		Retainer, Spring
7		Grip Handle Bicycle Matte Blk	31	532 16 98-65	Bearing Pvt Lift
8	532 12 45-26	Button Plunger Black	32	873 54 06-00	Nut Crownlock 3/8-24
11	532 13 98-65	Link Lift LH Fixed Length			
12	532 13 98-66	Link Lift RH Fixed Length	NOTE	: All compon	ent dimensions given in U.S. inches
13	532 12 46-70	Retainer Spring		1 inch = 25	.4 mm.

TRACTOR - - MODEL NUMBER MC1136 (MC1136B), PRODUCT NO. 964 77 30-01 MOWER DECK



# TRACTOR - - MODEL NUMBER MC1136 (MC1136B), PRODUCT NO. 964 77 30-01 MOWER DECK

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1		Mower Deck Assembly	53		Brake Assembly
2 3	872 14 05-06		54		Washer, Hardened
3		Bracket Assembly, Sway Bar	55		Idler Arm Assembly
4 5		Bracket Sway Bar	56		Spacer, Retainer
5		Retainer Spring	67		Knob RD 3/8-16 Plstc Thd
6 7		Bar Sway Deck	68	532 17 49-78	
7	532 14 06-08		89		Washer 13/32 x 13/16 x 11 Ga.
8		Bolt, Hex 3/8-24 x 1.25 Gr. 8	107		Spacer, Retainer
9		Washer, Lock Hvy Hlcl 3/8	108		Stiffener, Idler Arm
10		Washer, Hardened	113		Screw Thdrol 5/16-18 x 1/2
11		Blade, Mower	122		Rod, Brake, LH
13 14		Shaft Assembly, Mandrel,	123 146		Rod, Brake, RH
15		Housing, Mandrel, Vented	148		Bolt Carriage Idler Spring Return Idler
16	502 17 04-00	Bearing, Ball, Mandrel Stripper, Mower Deck	149		
19		Bolt, Shoulder	150		Retainer Spring Yellow Zinc Washer 9/32 x 3/4 x 16 Ga.
21		Nut Crownlock 5/16-18	152	532 17 60-79	
23		Bracket, Mower Deflector	158		Screw Hex Thd Cut 1/4-20 x 1/2
24	532 10 53-04		164		Bracket Asm Idler Support
25		Spring, Torsion, Deflector	168		Bracket Deck Cable
26	532 11 04-52		169		Bracket Asm Suspension
27		Shield, Deflector	170		Bracket Suspension RF
28		Washer 11/32 x 5/8 x 16 Ga.	171		Bracket Support Susp. Frt
29	532 12 19-80		172		Bracket Suspension LF
30		Screw Thdrol	185		Head Asm Cable clutch
31	532 12 99-63	Washer, Spacer			Mandrel Assembly (Includes Hous-
32	532 15 35-31	Pulley, Mandrel			ing, Shaft and Shaft Hardware Only
33	532 17 83-42	Nut, Toplock, Flanged			- Pulley Not Included)
34		Bolt Rdhd 3/8-16 x 1-3/4		532 17 52-54	Replacement Mower, Complete
36		Pulley, Idler, Flat			
40	873 68 06-00	Nut Crownlock 3/8-16	NOTE		ent dimensions given in U.S. inches
45	532 12 47-88	Retainer, Spring		1 inch = 25.	4 mm



# SERVICE POLICY WARRANTY



Issued January 1980 Revised January 1991

# LIMITED WARRANTIES FOR NEW PEERLESS GEAR POWER TRAIN COMPONENTS

#### A. Products Warranted

Peerless Gear and Machine Division of Tecumseh Products Company ("Tecumseh"), subject to the limitations contained below, will, at its option, repair or replace, without charge for parts or labor only, any part of a new Power Train Component (which as used herein means and includes the transaxle, gear box, transmission, differential and right angle drives, and any part of the Power Train Component), EXCEPT any new Power Train Component incorporated in equipment used for commercial or rental purposes, which is found upon examination by any Tecumseh Authorized Service Outlet or by Tecumseh's factory in Grafton, Wisconsin, to be DEFECTIVE IN MATERIAL AND/OR WORKMANSHIP if received by Tecumseh or a Tecumseh Authorized Service Outlet for such examination within TWO YEARS from the date of sale to the original consumer purchaser of Peerless Series 820, 900, 910, 915, 920, 930 transaxles and Series 1100 angle drive and ONEYEAR for all other Peerless products. New Power Train Components incorporated in equipment used for commercial purposes are warranted in the same manner and to the same extent EXCEPT such Power Train Components are warranted for NINETY (90) DAYS ONLY, and must be received by Tecumseh or by a Tecumseh Authorized Service Outlet for such examination within 90 days from the date of sale to the original purchaser. New Power Train Components Incorporated in equipment used for rental purposes are warranted in the same manner and to the same extent EXCEPT such Power Train Components are warranted for THIRTY (30) DAYS ONLY, and must be received by Tecumseh or a Tecumseh Authorized Service Outlet within 30 days from the date of sale to the original purchaser.

#### **B. Products And Items Not Warranted**

- 1. Alterations or Modifications of Power Train Components.
- 2. Accidents, Normal Maintenance, Failure to follow the Original Equipment Manufacturer's Manual.

This warranty covers only parts of new Power Train Components which are found upon examination to be defective in material or workmanship as delivered to the original purchaser. This warranty does not cover defects caused by depreciation or damage caused by normal wear, accidents, improper maintenance, improper use or abuse of the product, failure to follow the instructions contained in an Instruction Manual for the operation of the Power Train Component and parts. The cost of normal maintenance and replacement of service items which are not defective shall be paid for by the original purchaser.

#### C. Securing Warranty Service

Warranty service can be arranged for by contacting either a Tecumseh Authorized Service Outlet (any Tecumseh Registered Service Dealer, Tecumseh Authorized Service Distributor, or Tecumseh Central Warehouse Distributor) or by contacting Tecumseh, c/o Service Manager, Engine and Transmission Group Service Division, 900 North Street, Grafton, Wisconsin 53024. Warranty service can only be performed by a Tecumseh Authorized Service Outlet or by Tecumseh at its factory in Grafton, Wisconsin. At the time of requesting warranty service, evidence must be presented of the date of sale to the original purchaser. The purchaser shall pay any charges for making service calls and/or for transporting the product to and from the place where the inspection and/or warranty work is performed. The purchaser shall be responsible for any damage or loss incurred in connection with the transportation of Power Train Components and/or part(s) of the Power Train Components submitted for inspection and/or warranty work.

#### D. Limitation of Damages and Implied Warranties

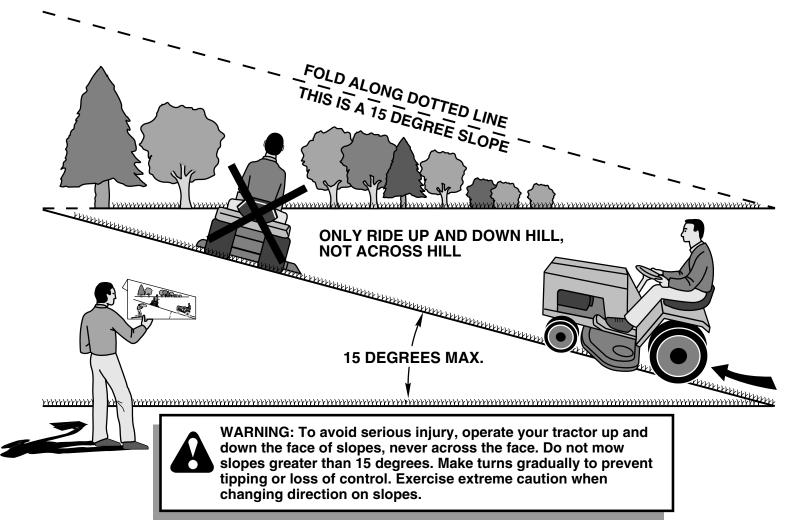
The foregoing EXPRESSED WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES. Neither Tecumseh nor any of its affiliates makes any warranties, representations or promises, written or oral, as to the quality of the Power Train Component or any of its parts, other than as set forth herein.

ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, TO THE EXTENT THAT EITHER MAY APPLY TO ANY PART(S) OF POWER TRAIN COMPONENTS, SHALL BE LIMITED IN DURATION TO THE PERIODS OF THE EXPRESSED WARRANTIES DEFINED IN PARAGRAPH A HEREOF. IN NO EVENT WILL TECUMSEH BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES AND/OR EXPENSES. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation(s) or exclusion(s) may not apply to you. This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

#### E. No Dealer Warranty

Tecumseh neither assumes nor authorizes any other person, natural or corporate, to assume for Tecumseh any other obligations or liabilities in connection with or with respect to any part(s) of a Power Train Component. The seller or dealer of part(s) of a Power Train Component has no authority, whatsoever, to make any representations or promises on behalf of Tecumseh or to modify the terms or limitations of Tecumseh's warranty in any way.

### SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION



- 1. Fold this page along dotted line indicated above.
- 2. Hold page before you so that its left edge is vertically parallel to a tree trunk or other upright structure.
- 3. Sight across the fold in the direction of hill slope you want to measure.
- 4. Compare the angle of the fold with the slope of the hill.

